Approaches to reduce the disaster vulnerability of forcibly displaced people: Humanitarian practitioners and the Rohingya

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NEWCASTLE
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Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Disaster Management

June 2023

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Note to readers

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Dedication

This work is dedicated to the countless individuals and families who have needlessly suffered as a result of disasters and forced displacement. I acknowledge the immense hardship and trauma they have endured, and the ongoing struggles faced in dispossession and displacement. May we commit to challenging the systems that perpetuate the marginalisation and persecution of these people. This study is also dedicated to the aid workers, volunteers, and organisations working tirelessly in response to the numerous displacement crises around the globe.

Acknowledgements

Abstract

Displaced people living in temporary shelter are often more vulnerable to disasters than those with secure tenure. Displaced people, whether internally displaced within their country or refugees across international borders, are generally unable to address the emergent vulnerabilities due to a lack of access to resources, support networks and fundamental rights. In many instances, humanitarian organisations lack the knowledge or capacity to best reduce disaster vulnerability in displaced settlements.

Research on the vulnerability of displaced populations, their unique challenges in the disaster context, and how humanitarian organisations can assist in this context is limited. Moreover, the limited understanding of how displacement exacerbates pre-existing vulnerabilities (e.g., poverty and lack of access to healthcare) and affects the ability to prepare for and recover from disasters, poses significant challenges to practitioners in this field.

In this context, a knowledge gap exists in the discourse of disaster risk reduction concerning understanding of the disaster vulnerability of displaced people, their specific needs, and potential interventions. Furthermore, the knowledge gap extends to the long-term impacts of displacement on disaster risk and how displacement may impact access to housing, employment, and other resources needed for recovery. Addressing this knowledge gap can inform displaced populations' disaster preparedness and response strategies. Therefore, this research aims to explore the effects of humanitarian operations on the drivers of disaster vulnerability for forcibly displaced populations.

The conceptual framework for this study was developed using the Pressure and Release model and the literature on forced displacement, humanitarian response operations, and

disaster vulnerability. Using abductive reasoning, the study develops propositions from the literature and further explores the propositions through a single phenomenological case study, utilising semi-structured interviews with thirty-two humanitarian practitioners. The data collected from these interviews were provisionally and structurally coded through Lumivero's NVivo software and explored through thematic analysis.

The research findings identify five key aspects. First, the disconnect between 'what is known about reducing disaster vulnerability' and 'what is implemented in practice by the humanitarian sector' contributes to significant levels of vulnerability in displaced populations. Second, among displaced populations, improving access to resources is not adequately utilised as a means to reduce vulnerability. Third, these shortcomings are negatively impacted by external influences from governments and donors that limit the ability of organisations to reduce vulnerability effectively. Fourth, intra-organisation coordination issues affect the outcomes of humanitarian programmes. The limitations of the cluster approach, lack of institutional knowledge, and difficulties in monitoring and evaluation impede the ability of organisations to reduce vulnerability effectively. Fifth, the humanitarian sector negatively affects outcomes by not adequately addressing social cohesion and aid equity. The lack of localisation of the NGO labour force, the increased strain on local resources, and unequal aid delivery lead to increased tensions between displaced populations and the host community which negatively impacts the drivers of vulnerability.

Overall, this thesis contributes to an understanding of how humanitarian operations can impact the disaster vulnerability of displaced populations and provides recommendations for improving the effectiveness of these operations in the future. This culminates in two key contributions. Firstly, a conceptual model based on the Pressure and Release model is

produced specifically for the context of forced displacement crises. Secondly, the *vulnerability headway model* is proposed for focusing activities designed to reduce the disaster vulnerability of forcibly displaced people.

Keywords: Disaster vulnerability, forced displacement, Rohingya refugee crisis, humanitarian response, progression of vulnerability

List of Abbreviations

ASEAN – Association of Southeast Asian Nations

ATR – Access to Resources Model

BOK – Body of Knowledge

CwC – Communicating with Communities

DRM – Disaster Risk Management

DRR – Disaster Risk Reduction

IASC – Inter-Agency Standing Committee

IDPs – Internally Displaced Persons

IOM – International Organisation for Migration

INGO – International Non-Government Organisation

ISCG – Inter-Sector Coordination Group

MEAL – Monitoring Evaluation and Learning

MOVE – Methods for the Improvement of Vulnerability in Europe Framework

NGO – Non-Government Organisation

PAR – Pressure and Release Model

PMLD – Post-Migration Living Difficulties

SDG – United Nations Sustainable Development Goals

Sendai Framework - The Sendai Framework for Disaster Risk Reduction 2015-2030

TDK – Tie Down Kits

TOC – Theory of Change

UNDRO – Office of the United Nations Disaster Relief Coordinator

UNHCR – United Nations High Commissioner for Refugees

UNICEF – United Nations International Children's Fund

UNOCHA – United Nations Office for the Coordination of Humanitarian Affairs

WASH – Water, Sanitation and Hygiene

WHO – World Health Organisation

WFP – World Food Programme

Definition of Key Terms

Capacity – *The combination of all the strengths, attributes and resources available within an organisation, community or society to manage and reduce disaster risks and strengthen resilience (UNDRR, 2023).*

Disaster Risk – *The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity (UNDRR, 2023).*

Disaster – *A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts (UNDRR, 2023).*

Hazard – *A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation (UNDRR, 2023).*

Internally Displaced Persons – *An IDP is "a person who has been forced to flee his or her home for the same reason as a refugee, but remains in his or her own country and has not crossed an international border" (Kennedy, 2008).*

Resilience – *The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including*

through the preservation and restoration of its essential basic structures and functions through risk management (UNDRR, 2023).

Refugee – *A refugee is someone who has been forced to flee his or her country because of persecution, war or violence. A refugee has a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership in a particular social group. Most likely, they cannot return home or are afraid to do so. War and ethnic, tribal and religious violence are leading causes of refugees fleeing their countries (UNHCR, 2021c). The Rohingya refugees are not officially registered as refugees; however, they are referred to as refugees throughout this study as they meet the UNHCR definition and are often referred as refugees in the literature. In some literature they are referred to as FDMN (forcibly displaced Myanmar national).*

Root causes – *Root causes refer to the underlying factors that contribute to the vulnerabilities and risks faced by communities. These root causes are the primary drivers of the progression of vulnerability and ultimately lead to disasters.*

Dynamic pressures – *Processes which translate the effect of root causes both temporally and spatially into unsafe conditions as well the institutional constraints triggered by the interaction between structures and processes (Wisner et al., 1994).*

Vulnerability –   *The characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard (Wisner et al., 1994).*

Preparedness –   *The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters (UNDRR, 2023).*

Mitigation –   *The lessening or minimising of the adverse impacts of a hazardous event (UNDRR, 2023).*

Exposure –   *The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas (UNDRR, 2023).*

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Chapter One – Introduction

1.1   Introduction

This introduction chapter provides an overview of the research problem and the rationale for the study. It begins by outlining the context for and background to the role of the humanitarian sector in addressing the disaster vulnerability of forcibly displaced persons. The chapter then introduces the research question, objectives, and the significance of the study in the field. The chapter concludes by providing an overview of the research design and methods used in the study, including the choice of theoretical perspective, data collection techniques, and data analysis methods. A research framework then sets the stage for the research that will be presented in the subsequent chapters of the thesis.

1.2   Background

Forced displacement is a growing humanitarian crisis affecting millions of people worldwide. According to the United Nations Refugee Agency (UNHCR, 2021a), there are over 89.3 million people who have been forcibly displaced from their homes, including 21.3 million refugees, 53.2 million internally displaced people, and 4.6 million asylum-seekers. Forced displacement can occur due to a variety of reasons, including conflict, persecution, and human rights violations (Ozaltin et al., 2020). But regardless of the reason, people who have been subjected to forced displacement often face challenging environments that can result in a higher risk of disasters. Refugees and internally displaced persons frequently face unique vulnerabilities and challenges in the context of disasters and are often living in precarious situations with limited access to resources and support networks (Few et al., 2021).

In the context of disasters, displaced populations may face additional challenges, such as a lack of access to early warning systems, limited ability to prepare for disasters, and limited

access to emergency services and assistance. Furthermore, displacement can exacerbate pre-existing vulnerabilities such as poverty, lack of access to healthcare, limited access to education, and lack of legal documentation. These pre-existing vulnerabilities can make it harder for displaced populations to prepare for, survive, and recover from disasters (Zaman et al., 2020). There is currently a lack of understanding of the long-term impacts of displacement on the various aspects of disaster risk. Displacement can lead to loss of property, income and livelihoods and can limit access to housing, employment, and other resources needed for recovery (Twigg, 2015). This can make it harder for displaced populations to rebuild their lives and communities following a disaster. Furthermore, it is not fully understood how displacement affects the ability of displaced populations to participate in disaster risk reduction processes, and how the host communities and the displaced communities interact in this context. Understanding these specific needs and vulnerabilities of displaced populations in the context of disasters can help inform disaster preparedness and response strategies to ensure that displaced populations receive the support and resources they need to endure and recover from disasters. This includes ensuring that early warning systems and emergency services are accessible to displaced populations and that recovery programmes take into account the unique needs and vulnerabilities of displaced populations.

Disasters have previously been described as either acts of God, natural events, or consequences of climate change (Alexander, 1993; Helmer & Hilhorst, 2006; Wijkman & Timberlake, 1984) and across various media outlets disasters are portrayed as somewhat unpredictable and fundamentally exogenous (Evans, 2011; National Geographic, 2016). However, this characterisation of disasters is contrary to contemporary disaster science and the Sendai Framework for Disaster Risk Reduction 2015-2030 (UN General Assembly, 2015),

which unequivocally recognises the broad range of underlying causes that contribute to the social construction of disaster risk. Furthermore, each of the three fundamental variables of disaster risk—hazard, exposure, and vulnerability—can be argued to be at least partially anthropogenic. Hence, disasters are not only unnatural, but they cannot exist in isolation as a thing or object. They can only exist in a moment in space and time as the actualisation of a broader range of social and historical processes (Oliver-Smith et al., 2016). A disaster triggered by an environmental hazard is often inaccurately referred to as a *natural disaster,* such as volcanic activity, seismic activity, cyclones, heavy rainfall, or climatic trends (Kelman et al., 2016). However, these hazards can only become disasters when interacting with our own vulnerability, which refers to the propensity of a system to be harmed (UNDRR, 2023). Hence, with our current understanding of the importance of focusing on the vulnerability of human systems, research that seeks to understand the mechanisms for reducing the vulnerability of some of the most vulnerable populations in the world is called for—in this study, we focus on forcibly displaced people. Research in this area is necessary to improve the long-term outcomes of the humanitarian response to refugee crises.

One of the major challenges faced by forcibly displaced people is their exposure to challenging environments. These individuals often live in crowded and unsanitary conditions, with limited access to basic necessities such as clean water, food, and healthcare. They usually lack durable shelter and live in densely populated camps or informal settlements. In addition to the challenges of their living conditions, forcibly displaced people can also be at a higher risk of being affected by disasters (Twigg, 2015). They can live in areas that are prone to hazards such as floods, earthquakes, and landslides, and may not have the resources or knowledge to prepare for or respond to these events. Land that is available for refugee camps and IDP settlements, is often located in flood-prone areas, and individuals living in these settlements

may not have access to early warning systems or have the means to evacuate before disasters.

1.3   Problem Statement

There are nearly 90 million forcibly displaced people around the globe and many of these people will continue to live in 'temporary' shelter for the foreseeable future. There are many inherent characteristics of being forcibly displaced that influence the progression of disaster vulnerability.

This research will consider disaster risk as a product of social interactions embedded within social structures (Lim, 2011). This perspective allows for reflection on how communities manage uncertainty rather than considering risks as externally quantifiable objects. This can be further explored through the Pressure and Release model (PAR), which shows that the progression of vulnerability is made up of root causes, dynamic pressures, and unsafe conditions. This explains how disasters can be seen to have a very slow onset and how the 'pressure' leading to a disaster may be increased by social, political and economic factors over decades or even centuries (Wisner et al., 2004).

Many of the root causes of vulnerability are likely to be influenced by the inherent characteristics that come from being forcibly displaced. In a study by Luci (2020), changes in family, relational, social and cultural lives are shown to contribute to trauma and poor mental health. Additionally, physical health can be affected by forced displacement, with many case studies showing increased morbidity and mortality (Reed et al., 2018). Those forced from their homes by conflict are also more likely to become exposed to heightened risk from environmental hazards where they resettle (Few et al., 2021).

Humanitarian organisations often lead initiatives to reduce disaster vulnerability in contexts where there are large groups of forcibly displaced people. Research has shown that there is a need to better understand how to manage the long-term impacts of shelter, the transition from response to recovery, interdependency among actors, and institutional knowledge (Acosta, 2013; Opdyke et al., 2020; Patnaik & Shambu Prasad, 2021; Rouhi, 2019). Humanitarian agencies are vitally important to communities for reducing disaster risk, however, coordination issues and external influences have been shown to reduce their effectiveness (Acosta, 2013).

These statements have guided the formation of the research question, aims and objectives of this thesis to explore the extent to which humanitarian response operations address the progression of disaster vulnerability for displaced people. By understanding the connections between disaster vulnerability and forced displacement in the context of forced displacement, we will be able to develop meaningful contributions to theory and practice.

1.4 Research Question, Aims and Objectives

1.4.1 Research Question:

The research question for this study is:

"How do humanitarian operations impact the progression of disaster vulnerability of forcibly displaced populations?"

1.4.2 Research Aim:

The aim for the study is:

To explore the impact of humanitarian operations on the progression of disaster vulnerability of forcibly displaced populations.

1.4.3 Research Objectives:

The research aim will be met by addressing the following objectives:

1. Develop a conceptual framework to explore the nexus of disaster vulnerability and humanitarian operations in the context of forced displacement

2. Empirically investigate disaster vulnerability and humanitarian operations in the context of forced displacement using the Rohingya refugee crisis in Cox's Bazar as a single case study strategy

3. Identify the humanitarian operation factors impacting the disaster vulnerability of Rohingya people displaced to Bangladesh

4. Revise the conceptual framework based on the case study findings

5. Develop theoretical propositions about how humanitarian agencies contribute towards responses to disaster vulnerability amongst displaced populations.

1.5 Research Scope

This research investigates the impact of humanitarian agencies on the vulnerability of displaced people, using a case study of the Rohingya refugees in the Cox's Bazar region of Bangladesh. The study will begin by reviewing current vulnerability theory, humanitarian operations, and forced displacement literature to provide a comprehensive background to

the area. This will be followed by an analysis of the vulnerability of the Rohingya people, taking into account various factors such as socio-economic status, gender, age, and access to resources. The research will then consider the reduction of vulnerability through the humanitarian response by examining the effectiveness of interventions and programmes implemented by humanitarian agencies to reduce the vulnerability of the Rohingya refugees. This will involve an analysis of the strategies, approaches, and opinions of humanitarian practitioners.

To ensure that the study is clear and concise, certain constraints have been established to define the scope of the research. The study will focus specifically on practitioners working with Rohingya refugees in Bangladesh. IDPs and refugees in countries other than Bangladesh are outside the scope of this study. Additionally, the research will exclude existential threats and hazards that are beyond the limits of vulnerability models, such as mass extinctions, pandemics, and nuclear war. The study will also exclude vulnerability to technological hazards, such as nuclear facility failures and oil or toxic spills, as these are primarily failures of techno-social systems. Furthermore, the case study will not cover the entire period of the Rohingya refugee crisis but will focus on the first five years since the 2017 mass exodus to Bangladesh. There has been a migration of Rohingya people from Myanmar to Bangladesh for decades; however, this research primarily focuses on the situation post-2017 when the population significantly increased.

Overall, the research aims to contribute to the understanding of how humanitarian agencies can effectively reduce the vulnerability of displaced people, with a specific focus on the Rohingya refugees in Bangladesh. The findings of the study will have implications for the

development of policies and practices that aim to reduce the vulnerability of displaced people in similar contexts.

1.6   Methodological Approach

This study uses a qualitative research methodology embedded in abductive reasoning using a single phenomenological case study approach. The qualitative method for this study utilises a literature review and analysis of semi-structured interview data based on the experiences of humanitarian practitioners. The literature review informs an initial conceptual framework and this framework is used to guide the interviews and further explore the propositions. Participants were selected from humanitarian organisations working in the Cox's Bazar region of Bangladesh as part of a single phenomenological case study. The data were collected through semi-structured interviews with these participants. Additional data were collected through field notes during participant observation in the three months that the researcher was embedded in the field. The interview data were analysed using Creswell's (2013) procedure for analysing data through the use of provisional and structural coding, describing and connecting themes that emerged. These themes are used to guide the discussion, make contributions to the conceptual model, and revise the propositions.

1.7   Significance

Forced displacement is a significant humanitarian crisis that affects millions of people around the world and is likely to worsen over time. People who are forcibly displaced often find themselves in challenging environments and are at a higher risk of disasters. Displaced people

face unique vulnerabilities and challenges in the context of disasters and are frequently living in precarious situations with limited access to resources and support networks. In the event of a disaster, displaced populations may face additional challenges, such as a lack of access to early warning systems, limited ability to prepare for disasters, and limited access to emergency services and assistance. Furthermore, displacement can exacerbate pre-existing vulnerabilities such as poverty, lack of access to healthcare, limited access to education, and lack of legal documentation. These pre-existing vulnerabilities can make it harder for displaced populations to prepare for, survive, and recover from disasters. There is a lack of understanding of the long-term impacts of displacement on disaster resilience and recovery. Displacement can lead to the loss of property, income, and livelihoods and can limit access to housing, employment, and other resources needed for recovery. This can make it harder for displaced populations to rebuild their lives and communities following a disaster. Therefore, it is important to understand the impact of displacement on disaster risk and recovery and to develop policies and programmes that can help to reduce the vulnerabilities of displaced populations in the context of disasters.

Beyond the significance of understanding this issue more broadly, it is also valuable to gain further insight specifically into the Rohingya refugee crisis. The context for the study is very topical and is constantly developing. The persecution of the Rohingya people has been in the major global headlines for the past five years (Asrar, 2017; Bainbridge, 2020; BBC News, 2018; Ellis-Petersen, 2019; UN News Service, 2021). The research presents a unique opportunity to bring valuable findings and recommendations to the discourse. The research also fills a crucial research gap in the field of disaster vulnerability. There is currently very little research that discusses the disaster vulnerability reduction of forcibly displaced people. The refugee crisis involves a diverse range of complications and can offer a wealth of valuable lessons applicable

to communities outside of the region. In particular, it will offer insight into the impact that humanitarian practices have on disaster vulnerability. At present, there is a lack of research in Rakhine State and the Cox's Bazar region on the topic, partly due to limited access.

As displaced people are often disenfranchised and deprived of their autonomy, their ability to influence their conditions is diminished. Thus, the onus to consider their disaster risk is at least partially laid on the humanitarian sector. Humanitarian actors can influence disaster vulnerability through a variety of activities. These can include:

- Conducting vulnerability assessments
- Clearly communicating re-zoning decisions
- Practising community-based disaster risk reduction and involving the community in resettlement decisions
- Providing housing design assistance
- Improving tenure security
- Ensuring relief and reconstruction aid is used effectively (Doberstein & Stager, 2013)

An example of how these methods have been used effectively is in the recovery and reconstruction following the 2004 debris flow disaster in Jimani, Dominican Republic. This disaster claimed 400 lives (INDRHI, 2004) and destroyed or significantly damaged over 870 homes (UN News Service, 2006). Within three weeks of the disaster, all residents were relocated to temporary housing in a safe location and within two years these residents were granted secure tenure in flood-resistant houses (UN News Service, 2006). Additionally, the disaster site was re-zoned to prohibit development due to its hazardous nature (Doberstein, 2009). However, solutions like this are more difficult with the added complexities that come with forced displacement contexts.

There are a small number of other studies on the approaches to reducing vulnerability within informal settlements and of displaced persons, with case studies in Lagos, Nigeria (Ibem, 2011), Vargas, Venezuela (Doberstein & Stager, 2013) and The Philippines (Allen, 2003). These studies identify challenges in reducing vulnerability, including a lack of education, institutional failure (Ibem, 2011), lack of secure tenure and poor housing design or location (Doberstein & Stager, 2013).

This study aims to further this inquiry through a phenomenological case study of the Rohingya refugee crisis in the Cox's Bazar region of Bangladesh. Some of the issues shown in the Lagos, Vargas, and Philippines case studies are also present in Bangladesh. However, this case study is unique in that it deals with refugees in a state of limbo. It is difficult to improve the security of tenure with uncertainty surrounding the repatriation of the Rohingya people (Lee, 2018). Additionally, this situation has added complexities to the coordination of such a large and lengthy response. This study explores how these approaches are coordinated in humanitarian projects involving a forcibly displaced population. This specific humanitarian crisis is one of the most important global issues of the last decade and necessitates a thorough investigation into how humanitarian projects address the increased vulnerability of forcibly displaced populations. The first stage of the research develops a conceptual framework based on the literature in the field of disaster vulnerability and humanitarian operations in the context of forced displacement. Through abductive reasoning, this study will further explore this framework using semi-structured interviews and propose an original contribution to the framework. Thirty-two semi-structured interviews were conducted with humanitarian practitioners operating in Bangladesh in response to the Rohingya refugee crisis. Using these approaches, the study identifies the compounding issues between these bodies of knowledge and highlights the leading root causes of disaster vulnerability. The findings from this analysis

will be used to refine propositions on how coordination can be improved in response to forcibly displaced populations and thus contribute to the reduction of their vulnerability.

1.8   Description of Subsequent Chapters

This thesis is divided into seven chapters: introduction, literature review, methodology, case study details, results, discussion, and conclusion. A visual description of the chapters is included as a flowchart in <u>figure 1</u> below. The document will also include appendices with details of the ethics approval, consent forms, information statement, analysis codebook, and related outputs. The contents of each of the main chapters are as follows:

- **Chapter 1: Introduction –** Provides the context for the research and clearly outlines the aims, objectives, scope, and significance of the study.

- **Chapter 2: Literature Review –** Explores the existing literature within the field. The chapter is divided into subsections that will consider vulnerability definitions, vulnerability of the Rohingya, forced displacement, humanitarian coordination, and vulnerability theory. This chapter also presents the conceptual framework that guides the interviews and analysis.

- **Chapter 3: Methodology –** Provides details of the research methodology. This includes the research design, approach, data collection, study site, analysis technique, ethical considerations, and limitations.

- **Chapter 4: Case Study Details –** Examines the forced displacement of the Rohingya refugees. It provides a detailed analysis of the effects of displacement, as well as the challenges faced by displaced individuals and the response of humanitarian organisations. The chapter also examines exposure to natural hazards in the region.

- **Chapter 5: Results –** Reports the results from the thematic analysis. It presents the framework for the analysis including the generated codes, categories, and themes, along with sample quotations from the interviews for each individual code.

- **Chapter 6: Discussion –** Themes that emerged from the framework analysis are discussed. This chapter also presents a new contribution to the conceptual framework based on the findings from the previous chapter. Additionally, an original model of resource allocation is proposed.

- **Chapter 7: Conclusion –** Contains a summary of the findings, recommendations, and scope for future research. This chapter demonstrates how the aims and objectives have been met and provides an answer to the overarching research question. The chapter concludes with suggestions for a way forward.

Chapter 1 – Introduction
Explore the drivers of disaster vulnerability in the context of displaced people

Research Question

Research Problem

Scope

Research Aim and Objectives

Chapter 2 - Literature Review

Disaster Vulnerability BOK

Humanitarian Operations BOK

Nexus of BOKs
Explore the influences on disaster vulnerability for displaced people (Conceptual Framework)

Forced Displacement Context

Propositions from Literature

Chapter 3
Research paradigm, methodology & Methods

Chapter 4
Case study context

Analysis Method
Thematic analysis with theory and data derived codes

Data Collection
Semi-structured interviews

Chapter 5
Analysis and findings

Chapter 6
Discussion and development of new conceptual framework

Contextualise research findings within the literature

Chapter 7
Key findings and scope for future research

Implications for theory

Implications for practice

Objective 1

Objective 2

Objective 3

Objective 4 & 5

Figure 1: *Research framework*

Chapter Two – Literature Review

2.1   Introduction

This chapter includes the literature review, which aims to examine the intersection of disaster vulnerability and humanitarian response operations in the context of forced displacement. In order to thoroughly cover the subject matter and address the research question, the literature review is divided into two key bodies of knowledge. The first body of knowledge contains the literature in the field of disaster vulnerability, which refers to the susceptibility of individuals and communities to the impacts of natural and human-induced hazards. The second body of knowledge focuses on the humanitarian response operations that are implemented to assist displaced populations. This knowledge is used to inform the conceptual framework and create propositions that guide the analysis of the data. The literature review will form the foundation for the research question and the research design, and it will provide the necessary background information for the research project.
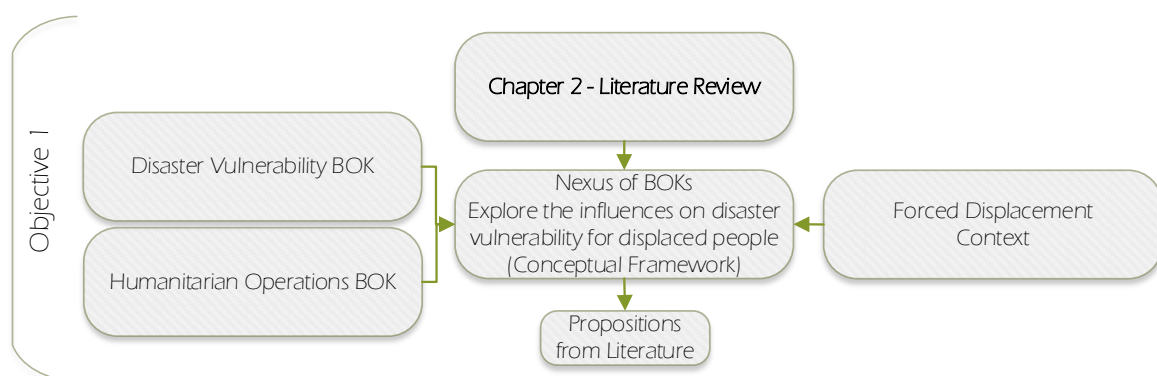
Figure 2: Chapter two section of research framework

The chapter begins by providing the context for forced displacement, as this is the lens in which disaster vulnerability and humanitarian operations are examined. Following this is an examination of the various definitions of vulnerability in order to understand this contested term in the context of the study. This section will also provide insight into how research on

disaster vulnerability has constantly evolved over the past two decades, leading to a widely recognised understanding of the concept where the drivers of vulnerability are long-term and are derived from a wider range of sources than previously thought, and the focus has been expanded beyond the built environment and is now cast over political, social, and economic spheres. Attention to the long-term drivers of disaster vulnerability was formalised in the disaster studies field with the Pressure and Release model (Wisner et al., 1994). More recent models include a more holistic approach and incorporate both the long-term drivers and the short-term solutions (Birkmann et al., 2013).

The section then specifically looks at disaster vulnerability within the context of forcibly displaced populations. There are several studies that show the negative impacts that forced displacement can have on mental health, physical health, social capital, and access to resources. This section also provides an overview of the types of settlements that displaced people are often moved to. The types of displaced settlements along with the management of these camps has been shown to have an impact on underlying vulnerability. The chapter then provides a review of the literature relating to humanitarian operations, including the coordination challenges, external influential factors, and the role of institutional knowledge. The literature shows the limitations faced by organisations in their attempts to reduce the vulnerability of displaced people as well as the policies, strategies, and practices that are used to provide assistance and protection to displaced populations.

Building upon the review of the two bodies of knowledge, this chapter presents a conceptual framework that will inform the analysis of the practices and processes of non-government organisations (NGOs) and their impact on reducing the disaster vulnerability of forcibly

displaced people. Additionally, several propositions are made based on the literature that will be further explored through the interviews.

2.2   The Context of Forced Displacement

Forced displacement, whether caused by conflict, persecution, or disasters, is a global phenomenon that affects millions of people every year. The displacement of individuals and communities from their homes and land can have a profound impact on their physical and mental health, as well as their vulnerability to further harm. The literature on forced displacement is vast, and covers a wide range of topics, including the effects of displacement on physical and mental health, the types of settlements in which displaced populations live, the management of refugee camps, and the impact of displacement on social cohesion. Over the past decade, the number of people forcibly displaced from their homes increased every year and is currently at the highest level since records began (UNHCR, 2022). In May of 2022, UNHCR (2022) made an announcement stating that more than 100 million people were forcibly displaced worldwide due to persecution, conflict, violence, human rights violations or events disturbing public order. Before this, in 2021, a more detailed report had looked into global trends of forced displacement and showed that current displacement was comprised of 27.1 million refugees, 53.2 million internally displaced people, 4.6 million asylum seekers, and 4.4 million Venezuelans displaced abroad (UNHCR, 2021b). Of this, only 429,300 refugees returned to their areas or countries of origin. According to an editorial in the journal Forced Migration Review (2022), forced displacement crises (also referred to as forced migration) can be divided into three major typologies: disaster-induced displacement, development-induced displacement, and conflict-induced displacement. Most displaced people will live in protracted displacement for more than five years. This is due to the limited availability of

resettlement places, restrictive host country policies and lack of sustainable peace in their country of origin. The average length of protracted displacement for refugees is 25 years, and more than 10 years for 90% of internally displaced persons (European Commission, 2022). These people are often supported by humanitarian assistance from NGOs, UN agencies, and government agencies. Although benefiting from humanitarian assistance, forcibly displaced people can be excluded from development programmes. Additionally, host countries often have policies restricting their access to labour markets and place limitations on their movement within the country. Furthermore, restrictions on settlement upgrades and infrastructure create a state of limbo, with an absence of long-term development prospects. This can lead to a negative impact on mental health, physical health, access to resources, social capital, and vulnerability (European Commission, 2016).

The literature on the effects of forced displacement shows various links to components of vulnerability. Displacement can lead to a lack of access to basic necessities such as food, water, and healthcare, which can have a significant impact on physical health. Displaced populations are also at risk of infectious diseases due to overcrowding and poor sanitation in displacement settlements. Additionally, displacement can lead to malnutrition, as displaced populations are more likely to have limited access to nutritious food (Zilic, 2018). Displacement can cause significant emotional and psychological stress, including feelings of loss, trauma, and grief (Flinn, 2020). Displaced populations may also experience feelings of hopelessness, isolation, and a lack of control over their lives. Furthermore, displacement can lead to a loss of social support networks, which can exacerbate mental health problems (Rugumamu & Gbla, 2003). Forced displacement can also increase vulnerability to further harm. Displaced populations may be at increased risk of violence, exploitation, and discrimination. Additionally, displacement can lead to a lack of access to legal protection and

justice, which can further increase vulnerability. Displaced populations may live in formal settlements, such as refugee camps, or in informal settlements, such as slums or squatters' camps. The type of settlement can have a significant impact on the living conditions and the access to resources and services. Effective management can improve living conditions and access to resources and services, while poor management can lead to poor living conditions and a lack of access to resources and services. Additionally, displacement can lead to a loss of social networks and social capital, which can have a significant impact on social cohesion (Cain, 2007).

2.3   Disaster Vulnerability Body of Knowledge

Disaster vulnerability refers to the susceptibility of individuals, communities, and societies to the impacts of hazards and disasters. This body of knowledge encompasses a wide range of research and scholarship, including the study of physical, social, economic, and environmental factors that contribute to vulnerability, as well as the strategies and interventions that can be used to reduce vulnerability and increase resilience. The field of disaster vulnerability has its roots in the study of hazards and disasters, and it draws on a variety of disciplines, including geography, sociology, economics, and engineering. In recent years, there has been a shift in the understanding of disaster vulnerability. Initially, disaster vulnerability was seen as a static concept, determined by factors such as poverty, lack of access to resources, and physical exposure to hazards (Chambers, 1983). However, more recent research has recognised that disaster vulnerability is a dynamic concept, shaped by the interactions between individuals, communities, and societies, and the physical and social environments in which they live

(Kelman, 2009). This changing understanding of disaster vulnerability has led to a more holistic and context-specific approach to disaster risk reduction and management.

Another important change in the conceptualisation of disaster vulnerability is the idea of disasters as a process rather than an event. This perspective recognises that disasters are not just the result of a single event, such as a cyclone or earthquake, but are the result of a complex process that includes the accumulation of risk, exposure to hazards, and the ability to cope with and recover from the disaster (Cutter & Finch, 2008). This process-based perspective on disasters emphasises the importance of understanding the underlying factors that contribute to vulnerability, rather than just focusing on the immediate effects of the disaster event. This makes mechanisms for affecting vulnerability incredibly complex. There are a variety of methods for measuring vulnerability, including quantitative and qualitative approaches, and different methods may be more appropriate for different contexts and populations. Additionally, there is a growing body of literature on strategies for reducing vulnerability, including community-based approaches, disaster risk reduction and management, and policies and regulations at the local, national, and international levels. The field of vulnerability is multidisciplinary and seeks to understand the social and economic factors that contribute to vulnerability to disasters. Vulnerability models have been used to guide research and practice in the field of disaster vulnerability and can inform the development of policies and programmes aimed at reducing vulnerability. This section of the literature review will explore this, along with an examination of the connection between vulnerability and other disaster risk components such as resilience, capacity building, and adaptation.

Key debates within this body of knowledge include the relative importance of structural versus social vulnerability, the role of poverty and inequality in shaping vulnerability, and the effectiveness of different approaches to disaster risk reduction. Additionally, the concept of displacement and displacement-related risks and how these shape vulnerability is a central area of discussion that is particularly relevant to this study.

2.3.1 Defining Disaster Vulnerability

In order to effectively evaluate the progression of vulnerability, it is important to have a clear understanding of the various definitions, theories, and concepts. The term vulnerability has many definitions, varying greatly across different disciplines and in different regions. One of the first formal uses of the term 'vulnerability' in scientific inquiry was in the analysis of rural poverty. It was introduced as one of the five interlocking elements that produce a 'deprivation trap': a condition of 'integrated rural poverty' in which there are numerous barriers that prevent poverty from being overcome (Chambers, 1983). This was presented alongside the other elements—physical weakness, income poverty, isolation, and political powerlessness—all of which are still intertwined with modern interpretations of vulnerability. From this, other definitions emerged; for example, within climate research, vulnerability is described as the degree to which a system is unable to cope with the adverse effects of climate change (Intergovernmental Panel on Climate Change, 2001), whereas in the environmental hazard field, it can be described as the conditions determined by economic, social, physical and environmental factors or processes that increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards (UNISDR, 2017). Furthermore, the concept of vulnerability can be widened to include multidimensional vulnerability, including

physical, social, economic, environmental, and institutional features. The widening of the concept leads to increased data complexity and difficulty in measurement (Birkmann, 2005), as shown in <u>figure 3</u>. Furthermore, Wisner et al. (1994) have proposed that the term *vulnerability* should be reserved for people and not extended to describe components of people's vulnerability, such as buildings, locations and infrastructure. For example, a building could be described as 'unsafe' or 'fragile' and a location could be described as 'hazardous' or another synonym, as using the term in reference to buildings or places rather than people could attenuate its impact.
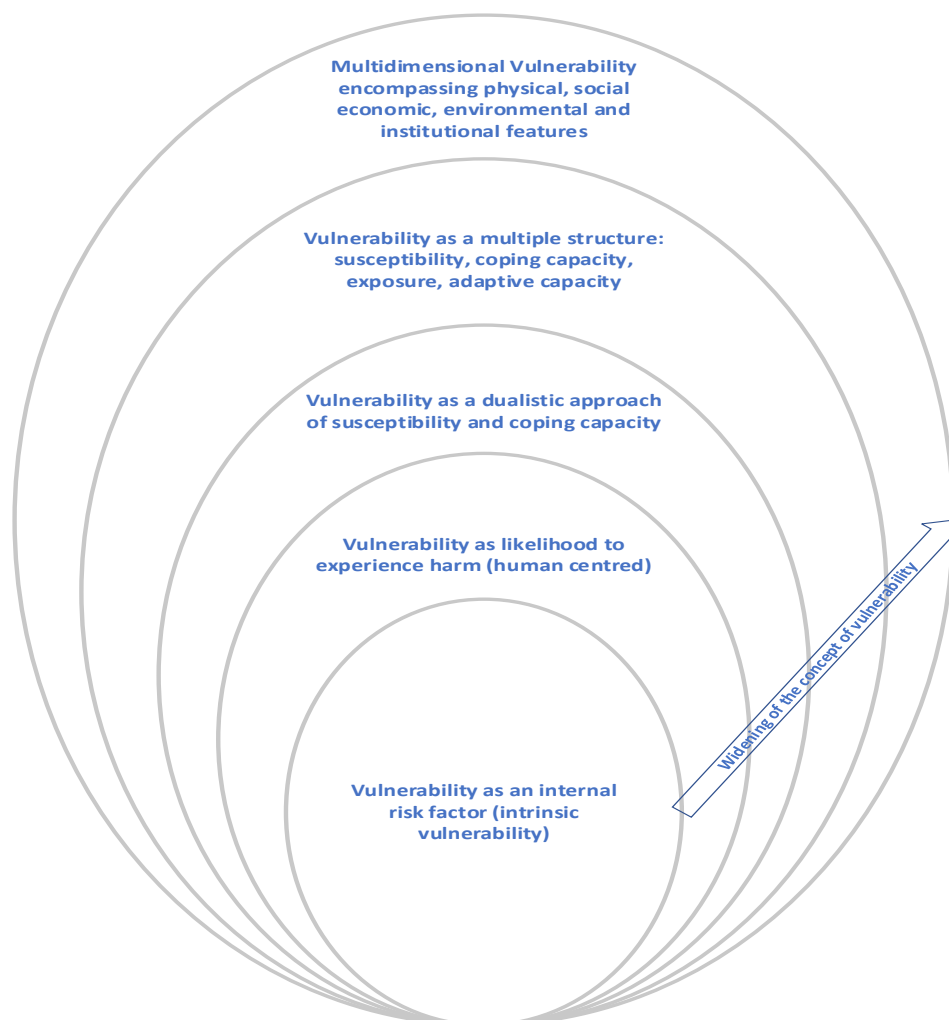
Figure 3: Key spheres of the concept of vulnerability. Author supplied, adapted from (Birkmann, 2005)

This study accepts the definition that vulnerability is *"the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard"* (Wisner et al., 1994, p. 11), however, it extends this definition to include man-made hazards. Furthermore, the term will only be used in reference to the vulnerability of people and not to describe unsafe buildings or locations.

2.3.2 The Evolving Understanding of Disaster Risk and Vulnerability

Beliefs and explanations of disaster risk and vulnerability have evolved over time. However, it is not a succession of new ideas and understandings replacing the old. Rather, it is an accumulation of ideas with some explanations building on past knowledge whilst others are contradictory. This evolving typology started with the 'act of God' and 'nature-based' paradigms. Within these paradigms, it is understood that disasters are out of human control and the physical trigger is considered synonymous with the disaster itself (Oliver-Smith et al., 2016). This belief is outdated within disaster research; however, it is sometimes still portrayed in this light through mainstream media (Narayan, 2017). Globally, many actors and institutions still describe disasters as being naturally occurring rather than a result of socially driven vulnerability (Lavell & Maskrey, 2014). This separation of disasters from the broader environmental, social, cultural, economic and political contexts is viewed as a barrier to the effectiveness of disaster risk reduction strategies in reducing disaster vulnerability (Weichselgartner & Pigeon, 2015).

Advancements in natural science and technology-based ideas facilitated the emergence of a new paradigm. This is known as the Hazard Paradigm, and is considered to be one of the first

contemporary paradigms (Gaillard & Mercer, 2012). From this viewpoint, it is understood that disasters are a result of natural hazards to which the affected population failed to prepare or adjust to manage the risk. This led to a belief that disasters can be controlled primarily through increased scientific knowledge of hazard patterns and innovations in disaster risk reducing technology. These technocratic approaches provide a sense of control over natural forces; however, in many cases it is ineffective in slowing the growth in losses caused by disasters. Technological approaches are often praised by politicians and the media as they provide a seemingly simple and logical solution to a complex problem (Lavell & Maskrey, 2014). In some instances, disaster mitigation technology can have an effect that is opposite to the desired effect and exacerbate disaster risk. For example, flood control dams can provide a false sense of safety and can encourage development and occupation of flood plains that would otherwise be deemed uninhabitable. Hence, many more people are affected when the dam's capacity is overcome or in the event of infrastructure failure. This approach was widely adopted throughout the developed world and often showed little consideration for developing nations (Quarentelli, 1987). Modern interpretations of disaster risk now place a greater focus on vulnerability, and although hazard intervention is still recognised, it is part of a broader discourse. For example, indicators of water supply resilience following disasters included many social attributes such as the Giving Index, homicide rate, assault rate, inverse trust in army, inverse trust in police, mean years of school, and perception of crime (Balaei et al., 2019).

2.3.3 Framing Vulnerability Within Disaster Risk Reduction

There is an increasing focus on the need to address vulnerability and on building capacities to reduce disaster risk. This does not neglect the other important aspects of risk, hazard, and disaster. It does, however, recognise that risk and disaster are always, at least in part, products of human action, decisions surrounding the allocation of resources, and the lack of power to make these decisions (Muller-Mahn, 2012).

This competing paradigm, which focuses on the political and ecological perspective, is often referred to as the vulnerability paradigm. Under this paradigm, it is understood that disasters are more likely to affect marginalised groups and people who lack the resources and protections available to others (Hewitt, 1983). O'Keefe et al. (1976) researched the rising ratio of disasters to hazards and determined that unequal socioeconomic development was a major contributing factor. This paper reinforced evidence that emerged from the devastating earthquake in Guatemala in the same year. The authors described the earthquake as a 'class-quake' due to the selective impact on poor and marginalised populations. Following on from this, Tierney (1999) found that vulnerability and low coping capacity is directly impacted by institutional constraints and social processes. Compared to the hazard paradigm, the vulnerability paradigm allows for a far greater focus on the sociological perspective of disasters.

In a paper by Terry Cannon (2008a), he explains that vulnerability is now becoming a vague term, like sustainability, which is beginning to signify many different concepts and is at risk of losing its true meaning. He explains that vulnerability has a number of components that should be understood separately and provides an explanation of vulnerability to natural hazards. Vulnerability (of the individual or household) should be understood as the

interaction of five components: governance, social protection, self-protection, wellbeing and base-line status, and livelihood strength and resilience. Beyond understanding the components of vulnerability, we also need to consider the diverse range of drivers of vulnerability which can be broadly grouped into three main categories: exposure, susceptibility, and resilience. The exposure category relates to environmental and physical drivers, such as the frequency of hazards, proximity to urban centres, condition of buildings, and housing type. The susceptibility category relates to socio-economic drivers, such as levels of sanitation, health facilities, income, insurance, education, occupation, and age. The resilience category relates to institutional drivers, these include warning systems, risk awareness and perception, culture, and development control. These drivers can be a useful metric in assessing vulnerability; however, they do not provide a holistic view (Salami et al., 2017). Complete measures should also use effective qualitative methods for assessing vulnerability (Birkmann, 2007). Much of the research into disaster vulnerability disregards the comprehensive view by making the assumption that vulnerability is quantitative, objective, absolute, and non-contextual (Kelman, 2009). In order to gain a comprehensive view of long-term vulnerability, it needs to be understood that vulnerability is qualitative, subjective, proportional, contextual, and most importantly, an ongoing process rather than a snapshot in time (Oliver-Smith et al., 2016).

The triangle of vulnerability (figure 4) is a diagram developed by Wisner et al. (2011), which adds emphasis to the importance of access and marginalisation. The diagram contains many of the same elements of the PAR model (discussed in section 2.3.7), but by arranging it in this way it is clear to see how lack of access and marginalisation is the main driving force behind vulnerability. Often the resources are available locally but many people are unable to access them due to a variety of reasons, including gender, caste, ethnicity, religion, physical

limitations, poor governance, politics, and inequitable distribution of wealth (Wisner et al., 2011). Access to resources will impact how sustainable, diverse, and resistant displaced peoples' livelihoods are. This access will improve livelihoods on an everyday basis, but also will determine their ability to avoid harm. This model demonstrates how it is a consequence of people's ability to maintain access to a large and sustainable set of resources. The diagram also highlights the fact that the root causes of vulnerability are interacting, as are the resources that enable people to protect themselves from natural hazards. Most of the resources in the diagram do not require further explanation. However, political resources should be understood as the degree of isolation that can limit a voice or access to administrative officials and politicians.
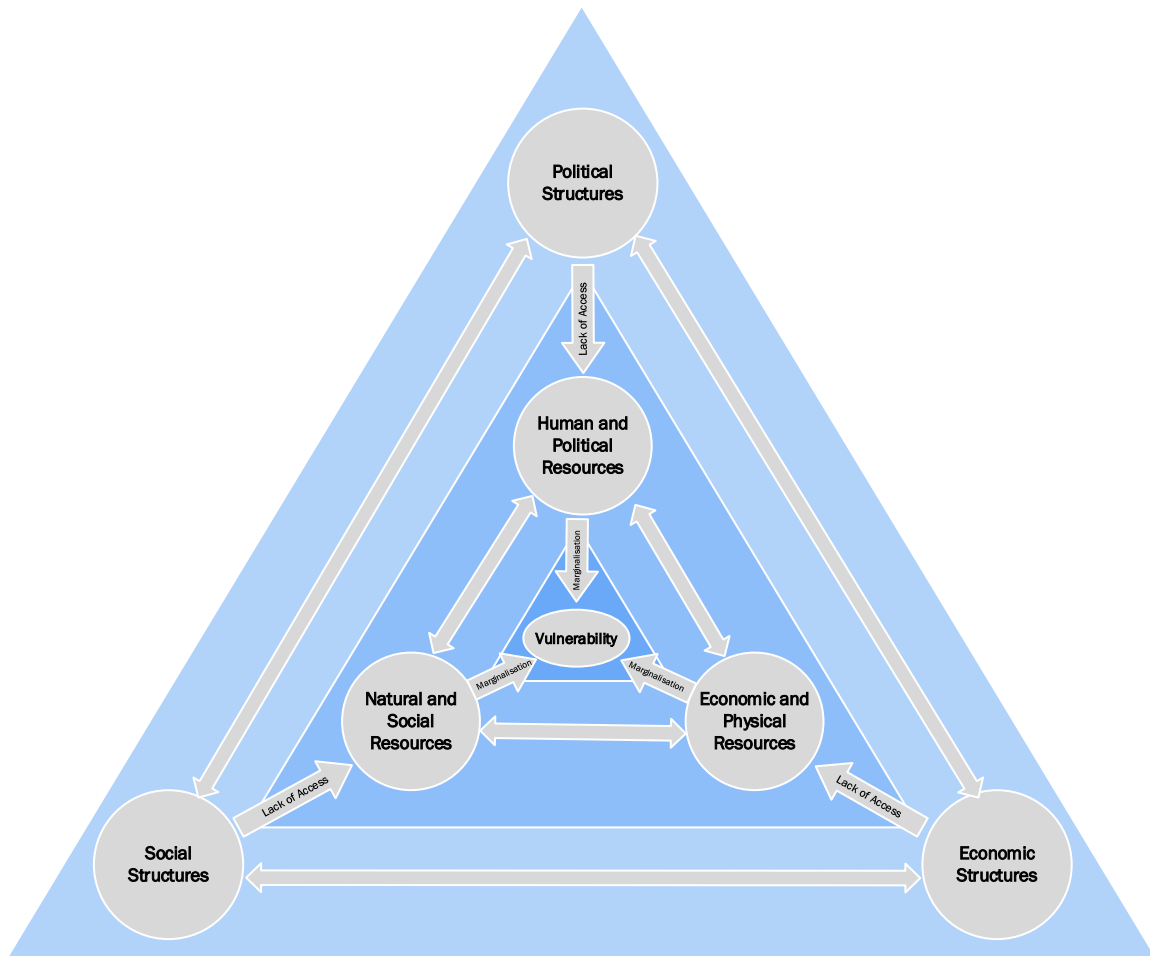
Figure 4: *Triangle of vulnerability. Author supplied, adapted from (Wisner et al., 2011)*

It should also be acknowledged that the interconnectedness of these elements can result in negative feedback loops by which the physical event can create vulnerability, and vulnerability can increase the likelihood of being impacted by a natural hazard (Duckers et al., 2015). Figure 5 demonstrates the evolution of a disaster model, taking into account the feedback loops that can exist between the physical event and human vulnerability. Similar feedback loops were described in the early interpretations of vulnerability from Chambers (1983), as described in section 2.3.1.
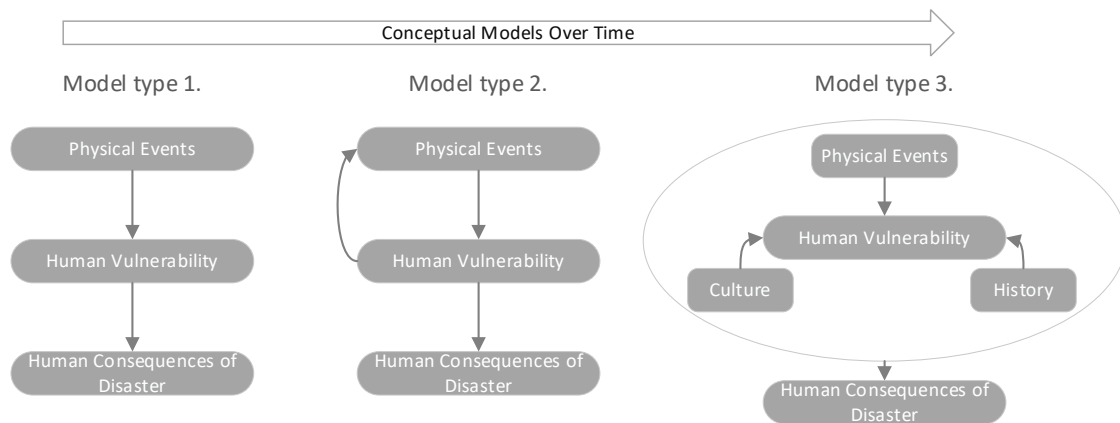
Figure 5: Context and consequences. Author supplied, adapted from (Duckers et al., 2015)

2.3.4 A Temporal Perspective: "disasters as processes"

Understanding vulnerability is further complicated by temporal and spatial changes. This is demonstrated in a study by Cutter and Finch (2008) which highlights the dynamic nature of social vulnerability by showing its significant variability across several different regions of the United States of America over five decades. This highlighted the potential issues that could arise from applying a generic vulnerability theory on a regional or global scale. Furthermore, Rufat et al. (2015) demonstrated in a meta-analysis of 67 flood case studies that the single most challenging aspect in measuring vulnerability is aligning the output metrics with the context in which the vulnerability occurs. Cutter and Emrich (2006) mention that the temporal context of vulnerability is crucial but is one of the least-studied aspects of vulnerability. Through understanding the temporal aspect of vulnerability and the historical influences, we can start to see disasters as processes as well as events. Although vulnerability manifests itself in the present in relation to the given context, it is constructed over time. Wisner et al. (2011) describe a good example of this concept using the Hawke's Bay earthquake of 1931. The earthquake itself had a magnitude of 7.8 and, along with subsequent fires, it led to the destruction of the town of Napier in the north of New Zealand. The earthquake can be seen

as an event. The duration of the hazard was short, and the response period could be defined in days or weeks. However, the true duration of the disaster is only evident when considering the antecedents and consequences. The roots of the disaster could be traced back to European colonisation and the decisions thereafter regarding land usage, building codes, provision of emergency services, social structures, etc. Furthermore, we need to consider what happened after the earthquake; the reconstruction, changes in policy, impacts on the economy, and so on. Although the physical shock felt from an earthquake is quick, the duration of the disaster spans from the distant past and well into the future.

Understanding disasters as both a process and event is a crucial step in addressing vulnerability. This is addressed in the conceptual framework (section 2.6) by considering the progression of vulnerability over time.

2.3.5   The Effects of Forced Displacement on Disaster Vulnerability

Although conflicts are present in many countries around the globe, they mostly exist in the developing or least-developed nations rather than in countries with developed economies (El-Masri & Kellett, 2001). Conflicts can persist for decades and are hugely detrimental to people, society, property, and economy. A war-torn country is characterised by death and injury to many people, widespread displacement, reduced security, destruction of properties, a lack of institutional capacity, vulnerability to disease and crime, lack of access to facilities, and erosion of social capital (Seneviratne & Amaratunga, 2011). Given these characteristics, it is understandable that disaster vulnerability is significantly affected by war, conflict, and displacement.

Displacement caused by conflict breaks up communities, which can diminish social capital (Cain, 2007). Strong social capital is a crucial component in building disaster resilience. Conflicts can alter gender roles (World Bank, 1998) and can destroy organisations and individuals who administer the rules, hence wiping out much of the positive social capital (Rugumamu & Gbla, 2003). The socio-economic disintegration caused by conflicts has a direct and negative effect on disaster vulnerability. In one study, it was shown that when comparing people from the same homeland, those that were living close to former resettlement camps show higher levels of trust towards their social network, members of other ethnic groups, and the general public (Abel, 2019).

The increase in vulnerability is not only a challenge for the country in which the conflict occurs. It can affect the whole region, with neighbouring countries often affected by an influx of refugees, a growing defence budget, drug production, trafficking, terrorism, and the spread of disease (Rugumamu & Gbla, 2003). Neighbouring countries will often house refugee camps with the aim of meeting the physical needs of the affected population. This includes basic health care, food, shelter, and WASH facilities (water, sanitation, and hygiene). These camps will offer the necessities for survival, however, are often lacking in any long-term development objectives. For example, Hirani (2014) discovered that in Pakistan these services often do not address children's rights, mental health, and development. The children in these camps are likely to experience negative impacts on their health, brain development, learning, coping, and competence. Hence, to enable displaced children to cope positively and become resilient, a well-designed child-care programme is recommended in the relief camps. An empirical study by Ibanez and Moya (2010) looked into the vulnerability of victims of civil conflict in Colombia. The research found a high level of vulnerability in displaced households and a high possibility of falling into poverty traps, highlighting the need to design and

implement specific policies for the victims to improve their ability to cope with displacement shock. In another Colombian-based study, it was found that in locations with a high annual incidence of hazard events, such as floods and landslides, it was a major challenge for IDPs to create a durable sense of security in their places of resettlement (Few et al., 2021). These issues are exacerbated by the reality that increasingly forced displacement is not a temporary phenomenon. Refugees are displaced on average for 25 years, necessitating long-term solutions (European Commission, 2022). Prolonged displacement is shown to have a negative impact on disaster risk, adding to the impact of camp-like living conditions. Additionally, parental separation or rejection during times of forced displacement can affect resilience and psychosocial well-being in later life. The study also discusses community resilience and its impact on the collective negotiation of traumatic incidents experienced by displaced communities, which can reduce the overall burden of mental illnesses (Siriwardhana et al., 2014). Additional research is required to ensure a more consistent and thorough investigation into the mental well-being of refugees who have settled in a new country for an extended period. Nonetheless, the existing body of evidence indicates that mental disorders are frequently observed in refugees long after they have resettled. This heightened vulnerability may not solely stem from their experiences of trauma during times of conflict but could also be influenced by socio-economic factors that arise after migration (Bogic et al., 2015).

2.3.5.1 Impact on Mental Health

Many forms of migration, but in particular forced displacement, can be linked to an increased level of suffering. Despite this, the mental health of refugees is still insufficiently studied due to a number of reasons (Morina, 2018). Firstly, language barriers make it difficult to study

refugee mental health. Many asylum seekers and refugees do not speak the locally spoken language, which necessitates the use of costly, professionally trained translators. Without effective communication and accurate psychometric data, it is not possible to conduct meaningful research or provide effective treatment. Additionally taking into account the cross-cultural aspects of mental health adds complexity to the field (Zipfel, 2019). A systematic literature review conducted by Morina (2018) showed large variations in the prevalence of post-traumatic stress disorder (PTSD), depression and anxiety disorders. These results suggest a lack of data concerning the wider extent of psychiatric disability among displaced people.

Despite a lack of understanding of the full effects of displacement on mental health, we do understand that refugees are more likely to experience factors that can contribute to poor mental health. Additionally, refugee mental health is shown to be affected by traumatic stressors and post-migration living difficulties (PMLD); however, their interaction and causal pathways are unclear (Schick, 2018). Refugees have frequently experienced domestic violence, poverty, and organised violence such as war, torture, and criminal violence (Catani et al., 2010; Fazel et al., 2012; Ruf-Leuschner et al., 2014; Steel et al., 2009). These are traumatic stressors and are known to contribute to mental ill-health. Additionally, they face post-migrational stressors, including social and interpersonal factors, along with stressors connected to the asylum procedure and socioeconomic situation. These stressors can play a role in the development and course of PTSD, depression, and anxiety disorders in refugees (Bogic et al., 2015; Li et al., 2016; Porter & Haslam, 2005). Furthermore, it has been shown that a reduction in PMLD predicted changes over time in depression and anxiety (Schick, 2018).

The lives of refugees are subject to certain suffering, which can be triggered by changes in social, family, and cultural lives. In one study investigating the relations between displacement, home, trauma and the self, these changes were shown to be so significant as to be traumatic. At the extreme end, these traumatic conditions can be seen as a displacement of the central axis of one's self, causing a deep change in the organisation and functioning of the self (Luci, 2020). Some research suggests that people who experience prolonged displacement are at a high risk for developing mental disorders. However, it is sometimes possible that individual and community resilience can act as protective factors. In some cases, return migration might be an option. However, there is limited evidence available on the effects on mental health of return migration following prolonged displacement (Siriwardhana & Stewart, 2012).

It is no surprise that we see these effects from displacement if we truly understand what community means and what a home represents. A community is a group of people who live in the same area and share common interests, values, and experiences. These individuals come together to form a collective unit that serves as a support system for each other. A house, on the other hand, is a physical structure that serves the primary purpose of providing shelter. It is a functional space that is designed to protect its occupants from the elements and provide a basic level of security. However, a home is much more than just a physical structure. It is a place where individuals and families can create a sense of belonging, establish their own identity, and express their unique personalities and values. A home is not just a shelter, but a reflection of the deep structures of society. It is a place where individuals can feel safe, comfortable, and secure, both physically and emotionally. The distinction between a house and a home is not trivial or sentimental, it is fundamental to understanding the different ways in which society provides for its members. A house is a functional space that

serves a basic need, while a home is a place that holds personal and emotional significance, reflecting the values and experiences of the people who live there (Oliver, 1978).

When a house, or home, is destroyed by a disaster such as a storm, flood, or earthquake, the impact goes beyond the loss of the physical structure itself. In addition to losing protection from the elements, families may also lose their livelihoods as a result of the disaster. They may be displaced from their community, lose access to their support systems, and struggle to rebuild their lives. Furthermore, the loss of a home can also have a significant impact on one's sense of dignity and place. The concept of 'place attachment' refers to the emotional and psychological connection that individuals have with the places where they live. People often identify closely with their homes, and the loss of a home can be deeply distressing, resulting in feelings of loss, grief, and even trauma (Flinn, 2020). Academic studies have also explored the impact of losing a home in the event of a disaster. Researchers have found that the loss of a home can lead to a range of negative outcomes, such as increased stress, mental health issues, and economic hardships. Moreover, the displacement and loss of community can also affect the individuals' physical and mental well-being. In this way, it is clear that the importance of a home goes far beyond its physical structure and encompasses the emotional, psychological, and social aspects of our lives (Kamani-Fard et al., 2013).

2.3.5.2 Impact on Physical Health

The effects of displacement on physical health are difficult to measure, with little research in this area. Some studies show that forced displacement caused by conflicts, wars, and disasters can often lead to poor health conditions and premature death. The extent of this trend is varied depending on the context, type of emergency, characteristics of the affected group,

stage of the emergency, and the migration flow (Reed et al., 2018). The full public health impact of displacement is not fully understood, with more research in the field needed (Siriwardhana & Stewart, 2012). However, there is some evidence to suggest that displacement has adverse effects on the probability of suffering tachycardia and hypertension, along with worse results on self-assessed health survey dimensions (Zilic, 2018). Additionally, displaced people are more likely to move to areas with environmental health hazards and to face immobility (McMichael, 2020). Furthermore, displacement can have adverse effects on the health and safety of women and girls. Women and girls living in refugee or IDP camps are often at a higher risk of sexual violence, with contributing factors such as poor lighting, location of communal latrines, and required activities such as collecting firewood (Verwimp et al., 2020).

Forced displacement often leads people to live in areas where the land is under stress due to unsustainable land practices and land degradation. This can negatively affect the health outcomes for the occupants of the region. In a study by Sena and Ebi (2021), they show the importance of land resources for human health, well-being, and overall life on earth. Land provides a variety of ecosystem services and benefits, such as food and clean water, shelter, medicine, energy, and regulation of natural hazards. However, human activities are negatively affecting these ecosystem services and biodiversity through land degradation. The drivers of this degradation are linked to population growth, urbanisation, consumption, and unsustainable agricultural and forestry practices, all within the context of unsustainable economic growth. Many of these drivers are exacerbated in displacement crises. The impact of land degradation and desertification can affect human health; however, the direct links are complex and difficult to measure.

2.3.6 Measuring and Reducing Vulnerability

There have been many contrasting models developed for measuring disaster vulnerability. These started with a focus on quantifiable indicators in the realms of physical science and engineering. In more recent years, more holistic vulnerability models have been developed that bring to light the importance of social, political and cultural factors (Duckers et al., 2015). One of the key difficulties in measuring and reducing vulnerability becomes apparent when looking at inherent or historical vulnerability. Taking a historical perspective when it comes to disasters can bring about a variety of practical benefits. For one, it can help to inform and shape industry standards, providing modern technology with useful applications. Additionally, it can shed light on issues of social injustice and prompt cultural comparisons of best practices. By understanding past disasters and their impacts, it can help to reduce communities' vulnerability and connect reconstruction efforts with broader developmental issues. This is what can be referred to as 'applied history'—using historical approaches to analyse and evaluate current conditions to inform future policy decision-making (Wisner et al., 2011).

The historical perspective on disasters provides a deeper understanding of the wider context of social vulnerability. By highlighting the significance of culture, the historical approach to disasters can reveal a community's vulnerability and resilience not only after a disaster but before it as well. Furthermore, it is predictive, showing the inherent vulnerability that has built up sequentially over time. Vulnerability is not binary but rather a matter of degree, and some communities are exposed to higher levels of background risk due to their cultural and historical experiences. Hence, considering this background social vulnerability is crucial for

emergency planners and managers to predict where disasters are more likely to occur, where they will have a higher impact, and where higher levels of intervention might be required before and after a disaster. Disasters are inherently linked to history, and understanding the social and environmental relationships that precede them is crucial for effective disaster risk management (Oliver-Smith, 2016).

After exploring many historical perspectives on disasters, McEntire (2001) developed a model of the influencing factors on vulnerability. He argued that vulnerability is increased through innumerable variables categorised under physical, social, cultural, political, economic, and technological headings. Table 1 shows a sample of factors that augment vulnerability.

Table 1: Variables that augment vulnerability

Category	Variables that augment vulnerability
Physical	• Proximity of people and property to triggering agents • Improper construction of buildings • Inadequate foresight relating to infrastructure • Degradation of the environment
Social	• Limited education (including insufficient knowledge of disasters) • Inadequate routine and emergency healthcare • Massive and unplanned migration to urban areas • Marginalisation of specific groups and individuals
Cultural	• Public apathy towards disasters • Defiance of safety precautions and regulations • Loss of traditional coping measures • Dependency and absence of personal responsibility
Political	• Minimal support for disaster programmes among elected officials • Inability to enforce or to encourage mitigation steps • Over-centralisation of decision-making • Isolated or weak disaster-related institutions
Economic	• Growing divergence in the distribution of wealth • The pursuit of profit with little regard for consequences • Failure to purchase insurance

	• Sparse resources for disaster prevention, planning and management
Technological	• Lack of structural mitigation devices • Over-reliance upon or ineffective warning systems • Carelessness in industrial production • Lack of foresight regarding computer equipment/programmes

Another more recent tool to assess vulnerability is the World Risk Index (Welle et al., 2013). This model is based on a wide variety of indicators to determine disaster risk. The vulnerability component of the model is comprised of susceptibility, lack of coping capacities and lack of adaptive capacities. The susceptibility indicators are related to the likelihood of harm, loss or disruption as a result of a hazard. This can be measured through indicators such as access to sanitation, poverty rates, dependency rates and income distribution. Lack of coping capacities refers to the abilities of either individuals, communities, or societies to minimise the negative effects of hazards through direct action and available resources. This can be measured through indicators relating to government corruption perceptions, medical services, insurance, and disaster preparedness. The lack of adaptive capacities encompasses measures and strategies for addressing and mitigating negative effects of future hazards. This is measured through indicators relating to education, research, gender equality and environmental protection.

It is one thing to determine which indicators can be used to effectively measure vulnerability. It is, however, much more difficult to develop strategies to positively impact these indicators and in turn reduce vulnerability or the progression of vulnerability. McEntire et al. (2010) identified four schools of thought on vulnerability reduction: the physical science school, engineering school, structural school, and organisational school. Within the physical science school, there is a focus on living in safe areas and there is an emphasis on exposure to the

hazard. The engineering school focuses on changes to the built environment to improve resistance. The structural school focuses on socioeconomic factors and demographic characteristics. The idea that guides this school of thought is that the individual becomes vulnerable foremost owing to their social structure and not necessarily because of their life choices (Palliyaguru & Amaratunga, 2014). The organisational school focuses on the effectiveness of response and recovery operations. This relates to preparedness, management, adaption, and improvisation. Additionally, McEntire et al. (2010) propose a number of strategies to address vulnerability within each of these schools. These strategies are outlined in <u>table 2</u>.

Table 2: *Strategies to address vulnerability*

School of thought	Proposed strategies to address vulnerability
Physical Science School	• Creation of warning systems • Cautious development • Environmental protection • Relocation of vulnerable communities • Effective land-use planning
Engineering School	• Increase resistance through construction practices and fabrication methods • Build structures and infrastructure adequately
Structural School	• Improve socioeconomic and demographic factors that usually increase a community's susceptibility
Organisational School	• Develop effective response and recovery operations • Practice effective preparedness • Develop effective leadership and management which allows for adaptation and improvisation

Source: (McEntire et al., 2010) as cited in (Palliyaguru & Amaratunga, 2014)

2.3.7 Vulnerability Theories and Models

Early models of disaster risk incorporate vulnerability, however, only at a given point of time. Some conventional views of disaster risk are based around a pseudo-equation which

expresses disaster risk as the product of hazard and vulnerability (R=HxV) (UNISDR, 2004). In this equation the hazard is determined from the frequency and the severity, and the vulnerability is determined by the exposure and capacity. However, the Asian Disaster Reduction Centre (2005) prefers to express disaster risk as a function of hazard, exposure and vulnerability (R=HxExV). Although useful to provide a simplified overview of risk, it should be acknowledged that these views neglect the progression of vulnerability and hence could suggest that the onset of a disaster is as instantaneous as the trigger. In a seminal book by Hewitt (1983), the idea of a calamity in a technocratic age is challenged by a focus on the social aspects of risk. Wisner et al. (1994) describe in the Pressure and Release model (PAR) how the progression of vulnerability changes over time. This explains how disasters can be seen to have a very slow onset and the 'pressure' leading to a disaster may be increased by social, political, and economic factors over decades or even centuries. This formative work influenced the direction of disaster risk research and a revised model was published in the book 'At Risk' (Wisner et al., 2004). This model characterises the progression of vulnerability into three parts: root causes, dynamic pressures, and unsafe conditions. Root causes are the underlying factors that contribute to vulnerability, and they are often depicted as being 'temporally distant,' meaning that they are rooted in past history. Examples of root causes include long-term social and economic inequality, poor governance, and lack of access to basic resources. Dynamic pressures refer to the current or ongoing factors that exacerbate vulnerability. Examples of dynamic pressures include population growth, urbanisation, and climate change. These factors are often more immediately apparent than root causes, but they still play a crucial role in contributing to vulnerability. Unsafe conditions refer to the immediate, observable circumstances that make a disaster more likely to occur. Examples of

unsafe conditions include lack of proper infrastructure, poor construction quality, and inadequate disaster preparedness measures.

The Access to Resources model is a perspective on disaster causality that emphasises the role of time in shaping the impact of disasters on affected populations. In this model, the significance of time is understood in terms of various temporal factors, such as frequency (how often a hazard occurs), the hour of the day (when a hazard occurs), the season (the time of year when a hazard occurs), and the speed of impact (how quickly a hazard unfolds). These temporal factors are considered important because they can have a major influence on the vulnerability of affected populations. For example, a hazard that occurs during the night when people are asleep will have a different impact than one that occurs during the day. Similarly, a hazard that unfolds quickly, such as a flash flood, will have a different impact than one that unfolds slowly, such as a drought. It is important to note that this model does not focus primarily on historical perspective; instead it focuses on how these temporal factors interact with other factors to shape the vulnerability of affected populations. Therefore, these factors do not need to be rooted in history but more in current or real-time circumstances. The model aims to help people understand how the timing and frequency of a hazard can interact with other factors, such as poverty, lack of infrastructure, and poor governance, to increase or decrease the vulnerability of affected populations. The Access to Resources (ATR) model is designed to be used in unison with the PAR model but with a greater focus on the micro-level, looking at the establishment and trajectory of vulnerability and how it varies between individuals. These models have been widely accepted and referenced within academic research (Gibb, 2018; Islam & Lim, 2015; Kita, 2017). However, there has been some criticism in the literature. Haghebaert (2001) suggests that the model is so excessively focused on the root causes that it neglects efforts of the state in providing safety. These efforts could be

considered less ambitious but are lifesaving in the short-term. Another criticism is that it does not consider the potential of affecting the natural and geophysical triggers (Turner et al., 2003). This is especially important during the immediate response to displacement where immediate hazard interventions are necessary in the short-term.

Address Root Causes	Reduce Pressures	Achieve Safe Conditions	Reduce Disaster Risk	Reduce Hazards
Increase the access of vulnerable groups to: • Power structures • Resources **Challenge any:** • Ideology, political system, or economic system where it causes or increases vulnerability	**Development of:** • Local institutions • Education • Training • Appropriate skills • Local investment • Local markets • Press freedom • Ethical standards in public life **Macro-forces:** • Population and health programmes • Manage urbanisation • Adapt arms industry for development purposes • Reschedule debt repayments • Re-afforestation	**Protected environment:** • Safe locations • Hazard-resistant building and infrastructure • Diversification of rural income opportunities **Resilient local economy:** • Strengthen livelihoods • Increase low incomes **Public actions:** • Disaster preparedness • Drought/cyclone/ volcanic/landslide/ warning systems	**Aim for a controlled situation** • No loss of life • Few casualties • Restricted damage • Food security	**A range of measures to reduce certain hazards:** • Flood controls • Shelter breaks to reduce wind forces

Figure 6: The Progression of Safety. Author supplied, adapted from (Wisner et al., 1994)

The Methods for the Improvement of Vulnerability in Europe (MOVE) framework (Birkmann et al., 2013), is a well-established framework designed to differentiate the key factors of vulnerability and provides a well-rounded conceptualisation of the multifaceted nature of vulnerability. These are represented by the broad areas of exposure, vulnerability, and lack of resilience. However, they should each be subdivided into local scale, national scale, and international scale. Furthermore, they can be divided into temporal and spatial subcategories.

Exposure refers to the extent to which the population falls within hazardous locations. *Susceptibility* (sometimes referred to as fragility) is the predisposition of the subject to suffer harm. *Lack of resilience* is determined by the access to and mobilisation of resources that a community could use to respond to a hazard. This includes measures before, during and after a disaster event. In addition to these key areas, Birkmann et al. (2013) stress that vulnerability is viewed through a multi-dimensional lens. This holistic view should include the social, economic, physical, cultural, environmental, and institutional dimensions. Since its conception, the MOVE framework has been applied both qualitatively and quantitatively in a variety of contexts with different hazards and settings (Depietri et al., 2013; Jackson et al., 2017; Kablan et al., 2017; Welle et al., 2014). The framework was developed with consideration to many key vulnerability concepts (Bogardi J & J, 2004; Cardona, 2004; Carreno et al., 2007; Turner et al., 2003). Although presented in a different style, the MOVE framework includes many of the same components as the PAR framework, the key differences being the inclusion of potential hazard intervention and short-term safety solutions. Jackson et al. (2017), however, argue that the model does not adequately consider temporal changes, hence making it unsuitable as the basis for the conceptual framework of this study, which focuses on the progression of vulnerability.

Over the years, there have been many published models used to conceptualise disasters. Twenty-five of these models were assessed for their suitability for this study based on the following criteria: current usage, popularity, international relevance, and relevance to long-term drivers of risk. The list of the assessed models and a summary of each is provided in appendix 2. A key limitation of many of these models is the natural hazard component. Conceptual models that aim to explain the causes of disasters often face a significant challenge in accurately accounting for the role of the natural hazard. This is because natural

hazards are complex and dynamic phenomena that can be difficult to fully understand and predict. There are several factors that contribute to this difficulty. One is that natural hazards are often affected by multiple and interacting factors, such as climate, geology, and land use. This makes it difficult to isolate the specific causes and effects of a natural hazard. Another factor is that natural hazards can be highly variable and can change rapidly over time, making it challenging to predict their behaviour or create accurate models. Moreover, natural hazards often have a dynamic role in the disaster event; they are not just a trigger, but they may play a continuous role through the different phases of the event. This means that the natural hazard may be interacting with other factors, such as social and economic vulnerability, lack of preparedness, and poor governance. As a result, it is important to consider a multi-disciplinary approach that integrates different fields of expertise, such as geology, meteorology, and sociology, to better understand and account for the role of natural hazards in disasters. This difficulty also stems from the fact that natural hazards are often complex, nonlinear systems and their behaviour is often difficult to predict, especially in the short-term. All of these factors make it difficult to capture the dynamic, complex, and uncertain nature of natural hazards in conceptual models and it can be a limitation in disaster risk management (Michellier et al., 2020).

2.4   Humanitarian Operations Body of Knowledge

This section of the literature review explores the role of humanitarian actors operating in refugee crises. The literature is divided into the themes of reducing vulnerability, camp management, external influences, coordination, and organisational issues. The humanitarian sector plays a crucial role in reducing the vulnerability of refugees and addressing their needs

during a crisis. However, the literature on humanitarian operations in refugee crises is vast and covers a wide range of topics, hence the literature included in this section is multi-disciplinary in nature and includes studies from many fields. The purpose of this section is to develop an understanding of the intersections between humanitarian operations, disaster vulnerability concepts, and forced displacement.

Humanitarian organisations play a crucial role in providing life-saving assistance and protection to refugees. They also work to reduce the vulnerability of refugees by addressing their basic needs, such as food, water, and shelter, and by providing services such as healthcare and education. Additionally, humanitarian organisations work to support the development of local capacities and resources to help refugees become more self-sufficient and resilient. However, these efforts can be attenuated by external influences that can take many forms, such as political pressure, funding constraints, or security threats. These external factors can have a significant impact on the ability of humanitarian organisations to provide assistance and protection to refugees. The literature on coordination issues in humanitarian operations in refugee crises is extensive. Coordination is crucial for ensuring that assistance and protection are provided in an efficient and effective manner, but coordination can be difficult to achieve in practice, due to the large number of actors involved and the complex political and security contexts in which humanitarian operations take place. This is increasingly important as the sector grows. The number of NGOs has doubled over the past decade, and many have grown in budget size, becoming closer to governments and official aid agencies. NGOs are acknowledged by many to be more effective agents of development than governments or commercial interests and are even seen as a 'magic bullet' for development problems. However, the real impact of the NGO sector is not well-documented, partly due to the weak performance-assessment and accountability methods of NGOs, and

partly because of the increasing involvement of NGOs in the official aid sector. Organisations need to improve the way they measure and account for their performance in order to be truly effective (Edwards & Hulme, 2013).

2.4.1 The Role of the Humanitarian Sector in Reducing Vulnerability

The task of reducing vulnerability in normal situations is shared between many stakeholders, including the government, private sector, community members, organisations, and local councils. However, in situations with high levels of displacement the humanitarian sector is often called to action on this crucial task. Whilst displaced, community members can be disempowered and governments can be ill-equipped to effectively reduce vulnerability in these situations. This leaves actors such as UN agencies, international non-government organisations (INGOs) and local NGOs to take the lead on the reduction of vulnerability.

A general humanitarian response plan will include strategies for improving shelter, food security, WASH, health, protection, education and nutrition (UNOCHA, 2017). All of these strategies for relief, recovery and development should have a positive impact on reducing vulnerability. However, different strategies in each of these areas can have varying effects on just how much it is reduced by. For example, investing in shelter will undoubtedly reduce vulnerability as it provides protection from adverse weather. However, some strategies could better reduce vulnerability in the long term, such as avoiding hazardous locations, improving the expected length of tenure, incorporating cultural norms, or reducing the degradation to the environment (McEntire, 2001). Other examples of strategies the humanitarian sector could adopt could include restoring and fostering traditional coping measures, developing education programmes that include disaster knowledge, reducing further marginalisation of

any groups, and restricting the occupation of hazardous land or mass unplanned urban migration (Chakrabarti, 2014).

In a review article by Brass et al. (2018) it was shown that the studies within this field focus around six predominant questions regarding the nature of NGOs, their emergence and development, how they conduct their work, how they relate to other actors, their impacts, and how they contribute to the (re)production of cultural dynamics. The review proposes a research agenda that addresses specific neglected sectors, geographies, and contextual environments, improve research designs to include counterfactuals or comparison groups, and improve data sharing. These neglected sectors are necessary to fully understand the impact of NGO operations on the progression of vulnerability.

The involvement of host communities in the management and planning of refugee camps is becoming increasingly recognised as an important aspect of ensuring the sustainability of the camps and the well-being of both the refugee and host communities. Host communities, especially in the context of extraction of natural resources such as water, trees for fire, and land, are seen as important stakeholders with whom relationships should be established. In response to this, Jahre (2018) suggests that new guidelines need to be developed to encourage engagement with host communities in the planning and operation of refugee camps. These guidelines recommend establishing effective communication and consultation with the host community, including identifying key stakeholders and representatives, to ensure that their voices are heard and their concerns are addressed. This can be done through regular meetings between camp managers, community representatives, and other relevant stakeholders to discuss issues related to camp management, including natural resources extraction, and to address any concerns that may arise. Additionally, the guidelines

recommend that representatives of the host community be invited to attend camp coordination meetings, where they can provide input and feedback on the management and operation of the camp. This can provide an opportunity for the host community to share their perspectives, to better understand the context of the camp and to express their needs. Furthermore, the guidelines advocate for involving host communities in the planning of natural resources use, for example, by creating joint management structures for forests, water points, and other resources. This can help to ensure that the resources are being used in a sustainable way and that the needs of both the refugee and host communities are being met (Jahre, 2018).

The integration of camps within the local context can be understood through the concept of embeddedness, which examines the connections and relationships between an entity, such as a camp, and its surrounding environment. This concept suggests that the integration of a camp into the local context can be understood through the network of interactions and dependencies that exist between the camp and the other entities in the area, such as the host community and local organisations (Granovetter, 2018). According to Håkansson et al. (2009), embeddedness is determined by the interplay between the activities that take place within the camp, the resources available to support those activities, and the actors who control and manage those resources. In other words, the way a camp is embedded within its local context is shaped by the various connections and relationships that exist between the camp, its inhabitants and the local community. The basic assumption is that as the interdependencies between the camp and its surroundings increase, the network of embeddedness becomes stronger. For example, if the camp and the host community share resources such as water and land, and if the camp provides employment opportunities to the host community, the ties between the camp and the community will be stronger. The concept of embeddedness

provides a lens through which to analyse the integration of camps in the local context, emphasising the importance of understanding the relationships and connections that exist between the camp and its surroundings. This understanding can be useful for camp managers in fostering a more sustainable and positive relationship with the host community, improving long-term outcomes.

2.4.2 Influential Factors on Humanitarian Operations

There are a number of factors that can influence the operations of the humanitarian sector. These include donor requirements, government restrictions, institutional knowledge, and political or religious agendas.

For better or for worse, in recent years there has been a surge in the number of private philanthropic foundations. A majority of the 85,000 private foundations in the United States have been formed after the year 2000. This dramatic increase in the number of philanthropic foundations has changed the humanitarian sector and has given billionaires more power over education policy, global agriculture, and global health than before (McGoey, 2015). There are many instances where the private sector uses large donations as a means to achieve business aims. In some cases, donors will influence the not-for-profit sector simply by being selective about the types of projects they fund (rather than basing this on need). Even more influence is felt when donors 'earmark' their donations, requiring that the funds are only spent in specific ways. Given that the donations often come from unrelated industries in the private sector, the donors are not best placed to determine which projects will best contribute to the desired overall impact (McGoey, 2015). Furthermore, we cannot assume that all donors have noble intentions. There is evidence to suggest that many philanthropic foundations will fund

causes based on motives beyond altruism. Donations can be used to satisfy other business goals, such as tax reduction, political influence, public perception (through *'greenwashing'*), or simply expanding market share in developing economies. An example of each of these practices is provided in the following paragraph.

Companies can reduce their taxable profit by donating to charities, however, clever accounting practices can ensure that profits are maintained (Callahan, 2017). Donations can be used as political tools by both the private sector and state actors to create favourable conditions for the company or country (McGoey, 2015). Companies with a bad reputation for environmental damage or human rights violations can improve their reputation through public relations campaigns based around well-timed donations to topical causes. For example, Coca-Cola was named the number one plastic polluter, however, The Coca-Cola Foundation later partnered with Landcare Australia in supporting natural waterways by developing environmental management practices and engaging in community watershed projects. This small contribution does not remediate the day-to-day damaging practices of the company but improves the brand image.

Humanitarian response and development work is largely based around the project form, often with short durations of less than a year. Projects have become commodities to be exchanged between NGOs and donors, with the project market a space where funding is exchanged for project documentation, leading to a principal-agent model (Laffont, 2003). As these exchanges are necessary for the prosperity of an organisation, it is often the case that funding requirements are given priority over the beneficiary needs (Freeman & Schuller, 2020). This need for visibility and project success influences design, implementation, and evaluation, hence further demonstrating the overall influence of donors on the humanitarian

sector beyond just resourcing (Al Adem, 2018). In a study by Nanthagopan et al. (2019) it was shown that NGO success is tied to project management and project success, and they concluded that project management success and project success are imperative for NGO persistence. Measuring long-term impact is difficult, whereas short-term output-based indicators are easy to quantify. This results in responses needing several years before effective MEAL (monitoring, evaluation, and learning) programmes are established. A baseline study and theory of change framework may take years to develop for a number of reasons. Firstly, the contexts of humanitarian crises are often rapidly changing and unpredictable, making it difficult to establish a clear baseline and identify relevant indicators to measure progress. The affected population may be constantly moving, which makes it difficult to track the same population over time. Secondly, humanitarian crises often involve multiple actors and stakeholders, each with their own agendas and priorities. This can make it difficult to coordinate and align efforts and to establish a shared understanding of the problem and the desired outcomes. Thirdly, many humanitarian crises are complex and multi-faceted, involving multiple causes and effects and intersecting with other issues such as poverty, inequality, and political instability. This makes it difficult to identify clear causal pathways and to design interventions that effectively address the underlying causes of vulnerability. Lastly, the humanitarian sector often operates in challenging and volatile environments, with limited access to data and information. This can make it difficult to collect accurate and reliable data to establish a baseline and to measure progress over time. Additionally, the data collection process can be dangerous, and the data may be inaccurate or incomplete, which can make it difficult to establish a clear baseline or theory of change.

Even when a theory of change framework has been established, it is difficult to programme the response as the time-span of the need for refugee camps is seldom known (Karsu, 2019).

The relationship between stakeholders in the humanitarian sector can create a principal-agent problem, whereby the NGO represents the donor; however, both parties are self-interested. Within the private-sector, this problem would often lead to inefficiencies referred to as agency-costs. However, in the humanitarian sector this leads to accountability issues. Zarnegar-Deloffre (2016) argues that transnational coordination of NGO accountability results from social learning that creates a global accountability community. This is built on shared practices, joint enterprise, and mutual engagement. Accountability is improved when relationships between NGOs and donors are collaborative rather than hierarchical or coercive.

Refugee camps can be analysed from three different perspectives: time, space, and resource. Each of these perspectives are directly influenced by the government of the host country and their objectives. The time dimension refers to the planned duration of occupation of the camps: temporary, semi-permanent, or permanent. The space dimension refers to the interconnectedness of the refugees with the host community. The resource dimension relates to the direction of resource flow. This can be either one-way, where the refugees only consume, or two-way, where the refugees produce goods or labour for the local economy (Jahre, 2018). If the host government is pursuing repatriation of the refugees, they may place restrictions on the types of projects that are allowed to reduce integration across all three dimensions.

2.4.3 Humanitarian Coordination

The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) will generally take the leading role in complex humanitarian crises following the disbandment of

the Office of the United Nations Disaster Relief Coordinator (UNDRO). The office is tasked with coordinating the humanitarian response, policy development and humanitarian advocacy during complex emergencies and disasters. However, policy setting and best practices are developed by the Inter-Agency Standing Committee (IASC). The IASC includes the UN operational agencies, including the United Nations High Commissioner for Refugees (UNHCR), the International Organisation for Migration (IOM), the World Health Organisation (WHO), and may extend the invitation to NGOs such as the Red Cross. The country-level activities are administered by an in-country humanitarian coordinator who is directly accountable to UNOCHA.
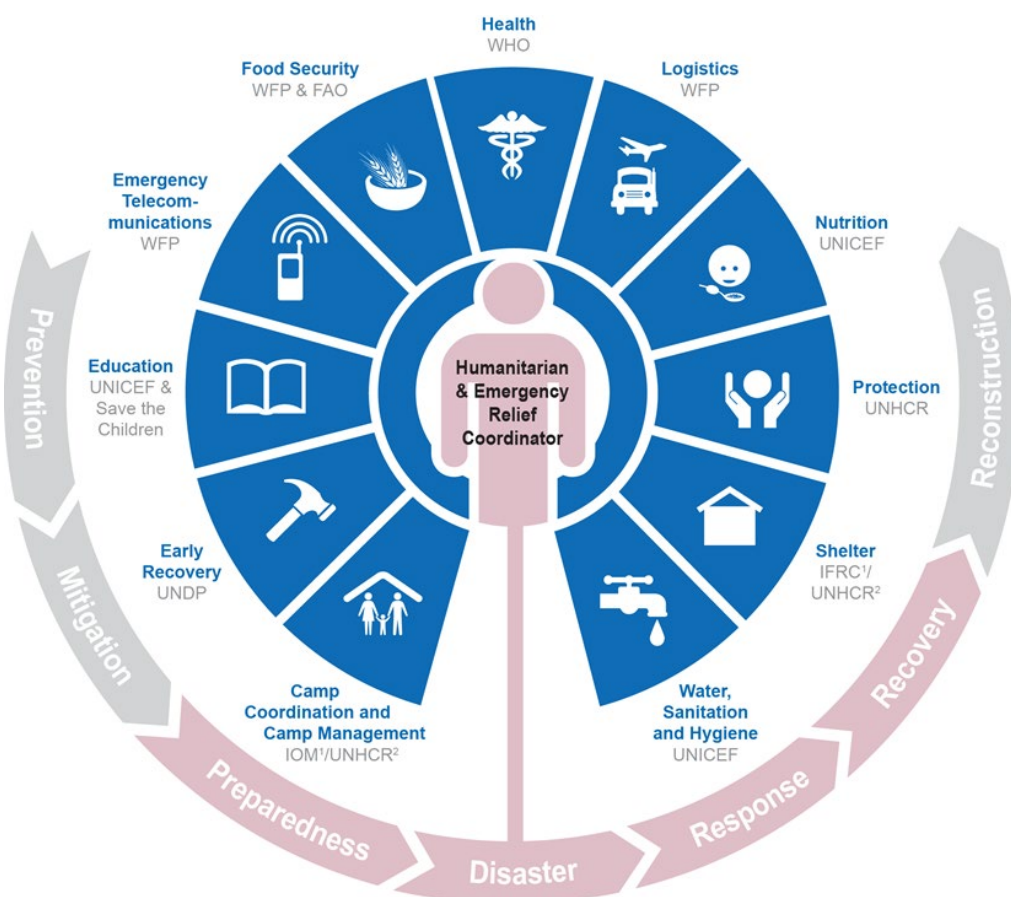
Figure 7: The cluster approach to humanitarian operations (UNOCHA, 2022)

Following the incredibly complex responses to the 2004 Indian Ocean Tsunami, and the War in Darfur, the cluster approach to humanitarian coordination was developed. This new approach sought to address key issues endemic in response management, such as a lack of clear operational accountability and a lack of leadership within sectors (OCHA, 2005). The clusters operate at both the global level and the country level. Within countries, the clusters are constructed as required during disaster responses, and the lead agencies are required to implement coordination mechanisms, ensure adequate preparedness, and provide strategic planning. At the global level, the clusters act as standing bodies that provide capacity building programmes and disseminate information on best practices. Within the cluster approach, the individual sectors will have a lead coordinating agency. For the shelter and camp management cluster, either UNHCR (The United Nations High Commissioner for Refugees) or IOM (The International Organisation for Migration) will take the lead depending on whether the displaced population are within the borders of their country of origin.

Some common critiques of the cluster approach include that it lacks an emphasis on victim participation, there is minimal integration of cross-cutting issues, and it creates sealed-off peer interaction (Featherstone, 2009; Heath, 2014; Streets, 2010). In most discussions of humanitarian aid, there is mention of the demand for improved coordination (Barnett, 2011). With many international actors working together in a unique context, it is inevitable that coordination will be challenging. Some researchers have challenged the effectiveness of the cluster approach as a whole, claiming that it holds substantial power over affected populations through assigning competences and leadership roles, although it may not help in disaster response (Heath, 2014). Fundamentally, the mechanisms for controlling power are flawed in that they fail to address the struggle between NGOs' autonomy and the need for coordination. Furthermore, the International Council of Voluntary Agencies (ICVA)

determined that humanitarian responses under the cluster approach still lacked sufficient practical guidance and blueprints. In response to this, the ICVA (2022) developed the NGO Coordination Resource Centre, an online platform for capacity building resources. However, the increasing number of NGOs could dilute their status and overburden the United Nations' evaluation and follow-up review process. The current evaluation method used by the UN does not convey an NGO's effectiveness and needs to be revamped. In a study by Brown (2009) it is recommended that the UN improves evaluative methods, such as holding a year-long UN moratorium on granting NGO status, conferring status solely by the UN, and considering the possibility of large international NGOs forming alliances to regulate themselves in venues of public transparency. The research highlights case studies of current methods of evaluation among NGOs and a new wave of self-sufficiency among NGOs that want to identify their success and areas needing improvement and to make their activities and collaborations transparent. The study concludes that the combined effect of civil society actors (government, business, and NGOs) can be greatly affected if NGO numbers are not regulated by the UN along with revised application and evaluative processes.

2.4.4 Refugee Camp Management

There are a number of key debates around refugee camp management, including issues such as the appropriate level of autonomy and self-governance for camp residents, the best ways to provide security and maintain order in the camps, the role of host countries and the international community in providing support and assistance to the camps, and the best ways to ensure that the needs and rights of refugees are protected and respected. Other discourses may centre around issues such as the provision of basic services such as food, water,

healthcare, the length of time that refugees should spend in camps, and the best ways to support refugees in transitioning to long-term solutions such as resettlement or integration in host communities. There may also be competing ideas around balancing the needs of refugees and host communities, and how to manage the relationship between the two groups. Additionally, there are discussions about the role of NGOs and other humanitarian organisations in managing and providing services in the camp.

In the 1970s, camp design was viewed by some experts as a permanent solution for refugee populations (Cuny, 1977). However, in more recent years, the UN and Sphere approach to camp creation has been to design and operate camps as temporary, transitory spaces for refugees (CHS Alliance, 2014). This approach is reflected in the shift in terminology, in which references to permanent elements such as 'villages,' and 'housing' were replaced with more temporary terms like 'shelters.' This change in approach aims to remove elements that might lead to the permanent settlement of refugees in camps, instead of finding a more durable solution (Kennedy, 2005).

The management of refugee camps can be divided into two main phases: establishment and administration. During the establishment phase there are a number of strategic one-off decisions, whilst in the administration phase there are tactical and operational decisions that are periodically made for the life-cycle of the camp (Karsu, 2019). Over the years, there have not been many studies investigating the administration of refugee camps. Cosgrave (1996) and Cuny (1977) have looked into the decision-making process during administration, however, in recent years, most of the commentary is within grey literature such as UNHCR and Sphere publications.

There are three main guidelines that inform refugee camp design: the UNHCR guidelines (2018), the IOM guidelines (2020), and the Sphere Standards (2014). These address shelter requirements such as protection from heat, cold, rain, wind, the structural hazard of the building, and disease vectors. In addition to shelter, these guidelines also include provisions for access to safe drinking water, energy for cooking, sanitation facilities, site drainage, and access for emergency services. The guidelines also outline the standards for non-food items such as lighting, clothing, bedding, and tools for general maintenance. Many of these minimum standards cannot be met due to constraints on resources or available land. This is increasingly problematic given the unprecedented scale of human displacement, leading camps to be seen as long-term settlements rather than temporary holding facilities (Kennedy, 2008). In long-term settlements, it has been proposed that a new approach using bottom-up decision making can be beneficial for improving socio-economic integration in comparison to a traditional top-down decision-making process (Jahre, 2018).

There are a number of different ways in which displaced settlements are organised. Each has benefits and drawbacks along with unique implications for disaster risk. Crosellis (2005) divides displaced settlements into six categories: host families, rural self-settlement, urban self-settlement, collective centres, self-settled camps, and planned camps.
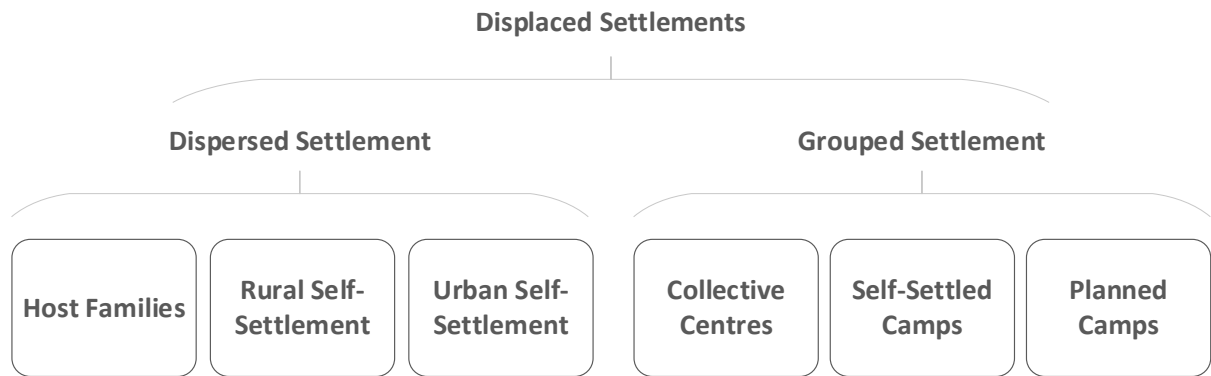
Figure 8: *Broad classifications of displaced settlements. Author supplied, adapted from (Corsellis, 2005)*

Organised camps are generally established on public land according to preestablished plans set out by the host government and UNHCR. There are a number of political and operational reasons for choosing to establish an organised camp. Operationally, organised camps can benefit humanitarian organisations through increased administrative efficiency and streamlined aid distribution. Politically, organised camps can increase the visibility of refugees. which can attract funding. Encampment can also be used to restrict the population's movement and access to the labour market (McConnachie, 2016).

Camps have been widely used as a means of providing temporary shelter and humanitarian relief to refugees for several decades. These camps are often located in isolated areas, and the design and management of the camps are typically carried out by governments and humanitarian organisations in a top-down manner. This traditional approach to camp design focuses on providing basic needs such as food, water, and shelter, but it does not typically address the longer-term needs of refugees. This includes the lack of privacy, autonomy, security and opportunity for community engagement (Ramadan, 2013).

Some studies have looked at comparing the outcomes of organised camps against urban settlement, with mixed results. In a study of refugees in Jordan and Lebanon, it was shown that refugees in the URDA camp (Union of Relief and Development Associations) live in more favourable conditions than those living in Zaatari (Kikano, 2019), whereas previous studies show that urban refugees in Jordan live in better conditions than those in camps. Organised refugee camps are often criticised, being described as sites for exclusion, containment, segregation and control (Agier, 2011). They have also been critiqued regarding the additional challenges in promoting self-reliance (Hunter, 2009). However, McConnachie (2016) argues that in some circumstances they can be seen as a space for agency, resilience and appropriation. The increasingly protracted nature of human displacement makes managing displacement in an organised camp model a limited tool (Ward, 2014). However, it has been demonstrated that in specific circumstances, for example, when host countries cannot manage refugee flow in urban settings, and decent and dignified living conditions are made available in camps, organised camps can facilitate better living conditions (Kikano, 2019). As the effectiveness of organised camps is dependent on the local context, this needs to be determined and settlement policy needs to be established. The consequence of not aligning policy to the context was shown in the Syrian refugee crisis in Lebanon, where an ill-fitted "no-camp" policy led to a large number of unofficial camps emerging (El Mufti, 2014).

The long-term goal of most governments is that refugees will repatriate to their country of origin. Studies show that when displaced people are impoverished by an economy based on relief they are unable to repatriate without a large investment in their economic rehabilitation (Black, 1994), whereas those that are afforded employment opportunities and freedom of movement are an economic asset and are in a better position to repatriate (Harrell-Bond, 1998).

Recently, an alternative approach to camp design, known as participatory camp management, has been gaining increasing attention among governments and humanitarian organisations. This approach emphasises the active participation of refugees and the local community in the design, development, and management of the camps. This approach is based on the idea that involving the refugees and the local community in camp development and operation can lead to more sustainable and appropriate solutions, as well as foster a sense of ownership and community among the refugees, which ultimately leads to an improved quality of life. However, the implementation of this participatory approach faces a number of challenges. For example, government and humanitarian organisations may lack the capacity or resources to effectively involve refugees and the local community in the planning and management of camps. Furthermore, there may be a lack of trust between the refugees and the local community, which can further hinder the effectiveness of the participatory approach. Additionally, political and security challenges may exist that limit the ability of organisations to access certain locations, so the camps have to be placed in remote areas which hinder the participation and engagement of the local community. Despite these challenges, the participatory approach to camp design holds great potential for improving the lives of refugees and fostering more sustainable and appropriate solutions. It is important for government and humanitarian organisations to continue to explore and develop strategies for implementing this approach and addressing the challenges that arise (Jahre, 2018).

2.4.5 Institutional Knowledge in the Humanitarian Sector

Institutional knowledge, sometimes referred to as institutional memory, can be defined as the collective understanding and ability of an organisation's workforce. It is held by the

employees, passed on through knowledge sharing, and is fostered through retention, training, and exposure (Curado et al., 2021). NGOs need to adopt a profile that seeks innovative ways of thinking and acting, and this is achieved by using knowledge management as a tool rather than conventional profits (Drucker, 2012). There are many studies focusing on the resource scarcity of NGOs (Corfield et al., 2013; Maalaoui et al., 2020), however, there is little research looking specifically into knowledge, despite its perceived importance (Zbuchea et al., 2020).

Institutional knowledge is an incredibly valuable asset to an organisation, as it can positively impact efficiency and efficacy measures. Companies will attempt to manage this by providing employee incentives, wellness programmes, mentoring programmes and promoting phased retirement processes. However, in the humanitarian sector, this is difficult to maintain as there are high levels of turnover and employees often do not stay with the organisations until retirement. NGOs consistently face higher levels of turnover compared to the private or government sector and more commonly have informal knowledge sharing (Huck et al., 2011). The most effective tool available to NGOs for improving retention is training and capacity building. In a study by Breman et al. (2019), it was found that over 71% of respondents agreed that training and capacity building leads to greater retention of staff.

In addition to the impacts of high turnover, institutional knowledge is lost when organisations become unsustainable and are forced to merge or cease operations. The sustainability of organisations is affected by supportive leadership, development of programmes, availability of material resources, availability of funds, and effective management. In a study by Okorley and Nkrumah (2012), it was shown that the most influential factors for the survival of

organisations is leadership and funding. This supports earlier research which found the key to survival of NGOs lies in the managerial leadership (Kusi-Appiah, 2006).

2.5   Nexus of the Bodies of Knowledge

Despite the three phenomena (disaster vulnerability, forced displacement, and humanitarian response) often occurring simultaneously, they are rarely considered simultaneously in the literature. Humanitarian actors have long acknowledged the necessity of addressing the root causes of vulnerability, however few researchers have explored this nexus (Ford et al., 2009; Patel et al., 2017). The relationship between the bodies of knowledge have been alluded to throughout the literature review, however this section, and the conceptual framework, aim to succinctly describe and summarise these connections.

There are some studies that have explored the link between humanitarian operations and drivers of disaster vulnerability. For example, Hülssiep et al. (2021), found that 20 months after the 2015 Nepal Earthquake the humanitarian assistance had not created any positive long-term influences on the root causes of vulnerability. It was found that although vulnerabilities could be addressed at the micro-level, in order to reduce disaster risk in the future, fundamental root causes need to be better addressed. Beyond this, we need to make inferences based on the bodies of knowledge.
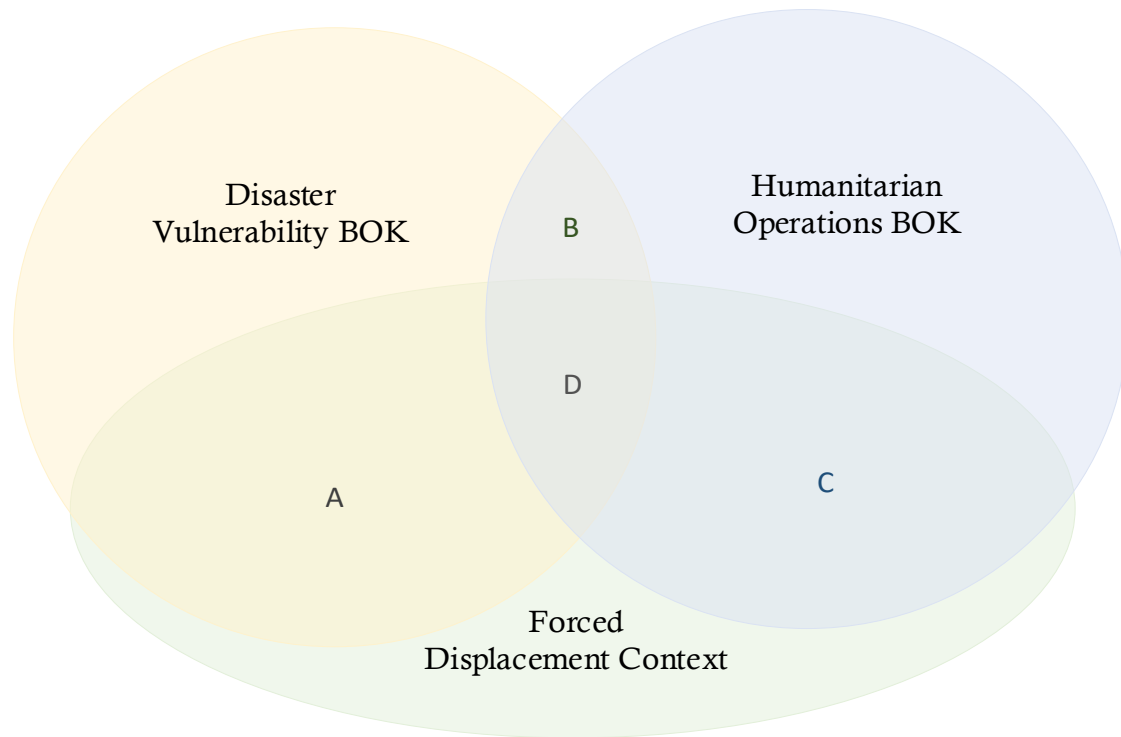
Figure 9: *Intersections of the bodies of knowledge*

The Venn diagram depicted in figure 9, shows the intersections of the bodies of knowledge, with the letters A-D marking the overlap between concepts.

a) The overlap between forced displacement and disaster vulnerability arises because forced displacement often results in a significant increase in disaster vulnerability. This happens when displacement exacerbates pre-existing vulnerabilities and creates new ones, such as lack of access to basic services and resources, social and economic disruption, and exposure to new hazards. This highlights the need for a joint response that addresses both the causes and consequences of forced displacement and seeks to reduce disaster vulnerability. The circle for forced displacement highlights the

causes, consequences, and responses to displacement, while the circle for disaster vulnerability highlights the factors contributing to vulnerability, such as lack of access to resources and exposure to hazards. The intersection between the two circles shows the ways in which forced displacement contributes to disaster vulnerability and the need for a joint response to address both.

b) In the context of disaster vulnerability, humanitarian operations are seen as a crucial component in reducing the vulnerability of affected populations. The knowledge of disaster vulnerability is focused on understanding the underlying factors that increase the risk and impact of disasters, such as poverty, poor infrastructure, and inadequate systems for early warning and response. On the other hand, the knowledge of humanitarian operations encompasses the principles, practices, and approaches used by humanitarian organisations to provide assistance and support to disaster-affected populations. This includes understanding the response and recovery phases of disaster management, and the provision of basic needs such as shelter, food, and healthcare. In the overlap between these two bodies of knowledge, the understanding of disaster vulnerability informs the design and implementation of humanitarian operations, and the knowledge of humanitarian operations can contribute to the reduction of disaster vulnerability. For example, a better understanding of the underlying factors that contribute to disaster vulnerability can help humanitarian organisations to design interventions that address these root causes, while effective humanitarian operations can reduce the immediate impact of disasters and support communities in their recovery.

c) Forced displacement and humanitarian operations are two distinct bodies of knowledge, but they overlap in several important areas. On one hand, forced

displacement refers to the involuntary movement of people from their homes due to conflicts, disasters, human rights abuses, and other reasons. It encompasses various aspects of the social, economic, political, and humanitarian challenges faced by displaced populations. Whereas humanitarian operations refer to the response by various organisations and actors to alleviate the suffering of people affected by humanitarian crises and disasters. The aim of these operations is to provide immediate assistance, protection, and support to the affected populations, with the ultimate goal of reducing their vulnerability and promoting recovery. The overlap between these two bodies of knowledge is the intersection of forced displacement and humanitarian operations. In this area, the focus is on addressing the needs and challenges of displaced populations through a humanitarian response, including providing shelter, food, water, health care, and protection, as well as promoting recovery and resolving the root causes of vulnerability. Both bodies of knowledge also share an emphasis on monitoring and evaluation, as well as learning and adaptation, to ensure that the interventions are effective and responsive to the changing needs of the affected populations.

d) The overlap between the bodies of knowledge is the intersection of the circles in the Venn diagram, which represents the areas where the concepts and issues related to humanitarian operations and disaster vulnerability in the context of forced displacement intersect and overlap. In this overlap, we can see how forced displacement contributes to disaster vulnerability, how humanitarian operations address the needs of displaced populations, and how the challenges faced by displaced populations can inform the development of more effective humanitarian operations.

By exploring the elements of the Pressure and Release model, we can make assumptions about how they are affected by forced displacement and humanitarian operations. Table 3 breaks down the progression of safety of the PAR model into individual components; each is considered in relation to displacement and humanitarian operations. An example of how each component of the PAR model is affected by these bodies of knowledge is provided. The information presented in this table informs the conceptual framework, which aims to summarise the key intersections and effects on long-term drivers of vulnerability. The table shows the impact of displacement, the limitations of refugees to influence these factors, and the limitations of the humanitarian sector to influence these factors. Some of the key limitations in each area are mentioned, however, it should be acknowledged that there are some limitations that affect the humanitarian sector across all activities. These include:

- Limited resources: NGOs often have limited funding and resources, which can make it difficult for them to address some issues, in particular, those that span beyond the initial influx of donations.

- Limited capacity: NGOs may lack the capacity and expertise to effectively address the challenges in a new region.

- Limited access: NGOs may have limited access to the affected communities, due to security concerns or lack of infrastructure.

- Limited coordination: NGOs may have limited coordination among themselves, as well as with other actors such as government, international organisations, and other humanitarian organisations, resulting in a lack of effective response.

- Limited understanding of context: NGOs may not have a full understanding of the local context and cultural dynamics, which can make it difficult for them to effectively address the needs of the affected communities.

- Limited ability to address structural issues: NGOs may have difficulty addressing underlying structural issues such as poverty, inequality, and political instability, which can exacerbate the issues.

- Limited ability to address long-term sustainability: NGOs may have limited ability to address long-term sustainability issues, as they are often focused on providing immediate relief and may not have the capacity or mandate to address long-term development needs.

The table and the conceptual framework are then used to make several propositions which are derived from the literature. These propositions have not been tested or verified in the literature, and therefore need to be further explored through the interviews. The interview questions are designed to refine the propositions and amend the conceptual framework.

Table 3: Progression of safety in the context of humanitarian operations with displaced people

Progression of Safety	Activity	Impact of displacement and limitations on forcibly displaced people	Limitations with humanitarian operations
Address Root Causes	**Increase access of vulnerable groups to power structures**	Displaced people will often lack the ability to become residents and in some cases are not even granted refugee status. This prevents them from having a voice in government. Their access to power structures is limited to inside the humanitarian sector.	Humanitarian organisations can advocate on behalf of refugees. However, host governments can be restrictive on the influence of international organisations in this space.
	Increase access of vulnerable groups to resources	Access to resources is limited for displaced population due to reduced saving and lack of access to some markets. A surge in population can also disrupt existing markets.	Organisations generally can address this through establishing markets and prioritising integration projects with host communities.

	Challenge any ideology, political system, or economic system where it causes or increase vulnerability	Similar to the lack of access to power structures, displaced people lack a voice in government and have a reduced ability to influence ideology, political systems or economic systems that cause or increase vulnerability.	Humanitarian organisations can advocate to disrupt systems that increase vulnerability; however, they are restricted by government and donors.
Reduce Pressures	**Development of local institutions**	Local institutions are lost during displacement. Refugees often need support to build institutions in the new location.	NGOs may not have a long-term presence in refugee camps, which can limit their ability to support the sustainability of local institutions over time. When NGOs leave the camps, their projects may not continue to be sustained by the local actors and communities.
	Development of education, training, and appropriate skills	Displaced people may not have the same level of access to education and training as the general population. This can be due to a lack of infrastructure or resources in their location.	Organisations can be limited by governments to only develop education appropriate for the displaced population's former location. There is often external pressure to encourage repatriation.
	Development of local investment and markets	Local markets in refugee camps can be limited due to a lack of access to resources and a lack of income.	NGOs may be limited in their ability to address the root causes of economic vulnerability in refugee camps, such as lack of access to land, resources, and opportunities. Additionally, INGOs may not have the necessary knowledge or expertise to understand the local economic context or to identify the most effective strategies for promoting investment and markets.
	Development of press freedom	Press freedom in refugee camps may be limited by restricted access to information, due to censorship, surveillance, or lack of data.	NGOs operating in refugee camps may be dependent on funding from host countries, which can limit their ability to advocate for free press or freedom of speech. Many refugee camps are located in remote or difficult-to-reach areas, which can make it

			difficult for NGOs to establish or support media outlets in these areas.
	Development of ethical standards in public life	Displacement can disrupt social norms and values and can lead to a loss of trust and sense of community among displaced people. This can make it difficult to establish and maintain ethical standards. The context of displacement can be characterised by a lack of accountability, rule of law, and transparency, which can also hinder the development of ethical standards in public life.	NGOs may have to navigate different cultural and ethical practices of the host country and the displaced population, which can cause conflicts over what is considered ethical or not.
	Population, health programmes, and managing urbanisation	Population growth and movement is difficult to predict with forcibly displaced populations. There can be rapid surges in population.	NGOs may have difficulty addressing underlying structural issues such as poverty, inequality, and political instability, which can exacerbate the challenges of rapid urbanisation, population growth, and health programmes in refugee crises.
	Adapt arms industry for development purposes	Limited application in displacement crises	Limited influence beyond advocacy
	Reschedule debt payments	Limited application when internationally displaced	Limited influence, however, if micro-financing is used as a development tool it should be advocated to be on soft terms.
	Re-afforestation	Re-afforestation requires available land. This is often hard to acquire in mass displacement situations.	Re-afforestation projects require active participation from the community to be successful. NGOs may have difficulty engaging the refugee population in the project, particularly if they are preoccupied with other pressing issues such as food security, housing, and health care.
Achieve Safe Conditions	**Safe locations**	Land is rarely available to displaced people in safe locations.	Relocation, even to a safer location, has a negative effect on other vulnerability factors.
	Hazard-resistant buildings and infrastructure	Durable materials may not be immediately available to displaced people and the immediate need for shelter	The location of the refugee camps, the terrain and climate of the area, the local laws and regulations, the availability of

		takes priority over hazard resistance.	materials and labour, and the accessibility of the location can all be further limitations that the humanitarian sector may face in creating hazard-resistant buildings and infrastructure.
	Diversification of rural income opportunities and Strengthen livelihoods	Through displacement, income opportunities to diversify livelihoods become scarce. Region-specific skills are lost, and networks are disrupted. Opportunities are often limited to various forms of physical labour.	The displacement situation often changes rapidly, and it may be difficult to create long-term solutions, as well as there being a lack of proper infrastructure and resources within the camps to support livelihood activities. There may be security and safety concerns within the camps that can limit the ability of displaced people to engage in income-generating activities.
	Increase low incomes	Income generating activities are scarce in refugee crises and in some cases are only available in the black market.	In many cases there are no incomes to increase. Organisations can build skills and capacity to improve income opportunities or through cash-based initiatives.
	Increase disaster preparedness and improve early warning systems	Displaced people often lack access to information about potential hazards and how to protect themselves. This can be due to language barriers, lack of access to news and media, or a lack of awareness about the risks in their new location.	Organisations can struggle to identify the specific needs and vulnerabilities of displaced people in the design and implementation of disaster preparedness and early warning systems.

2.6   Conceptual Framework

The conceptual framework acts as a blueprint for the inquiry, informing the data collection and the analysis. The framework describes the interrelated concepts and ideas that guide the research process. This research will be guided by a conceptual framework based primarily on the PAR model (Wisner et al., 1994) and Cannon's (2008b) five components of vulnerability,

and is influenced by propositions derived from forced displacement and humanitarian operations literature. The propositions are labelled **P1-P8** and are detailed in <u>section 2.7</u>. The PAR model was selected as the core of the conceptual framework for this study because it focuses on the progression of vulnerability rather than just the measurement of current indicators of vulnerability. It determines the underlying root causes of vulnerability and the level of vulnerability of people before and after a disaster (Birkmann, 2013). Furthermore, it is suitable for the context of forcibly displaced people as it allows for examination of power asymmetries and how they develop. It provides a means of understanding how vulnerabilities emerge within communities, with a focus on entrenched social hierarchies that may restrict access to power and resources. Additionally, aspects of Canon's (2008b) conceptualisation of vulnerability have been included in the model to highlight the key connections/disconnects in certain aspects of vulnerability. These offer unique opportunities, where targeted efforts can influence multiple components of vulnerability. Cannon's model highlights the interaction of the five components of vulnerability: governance, social protection, self-protection, wellbeing and base-line status, and livelihood strength and resilience.
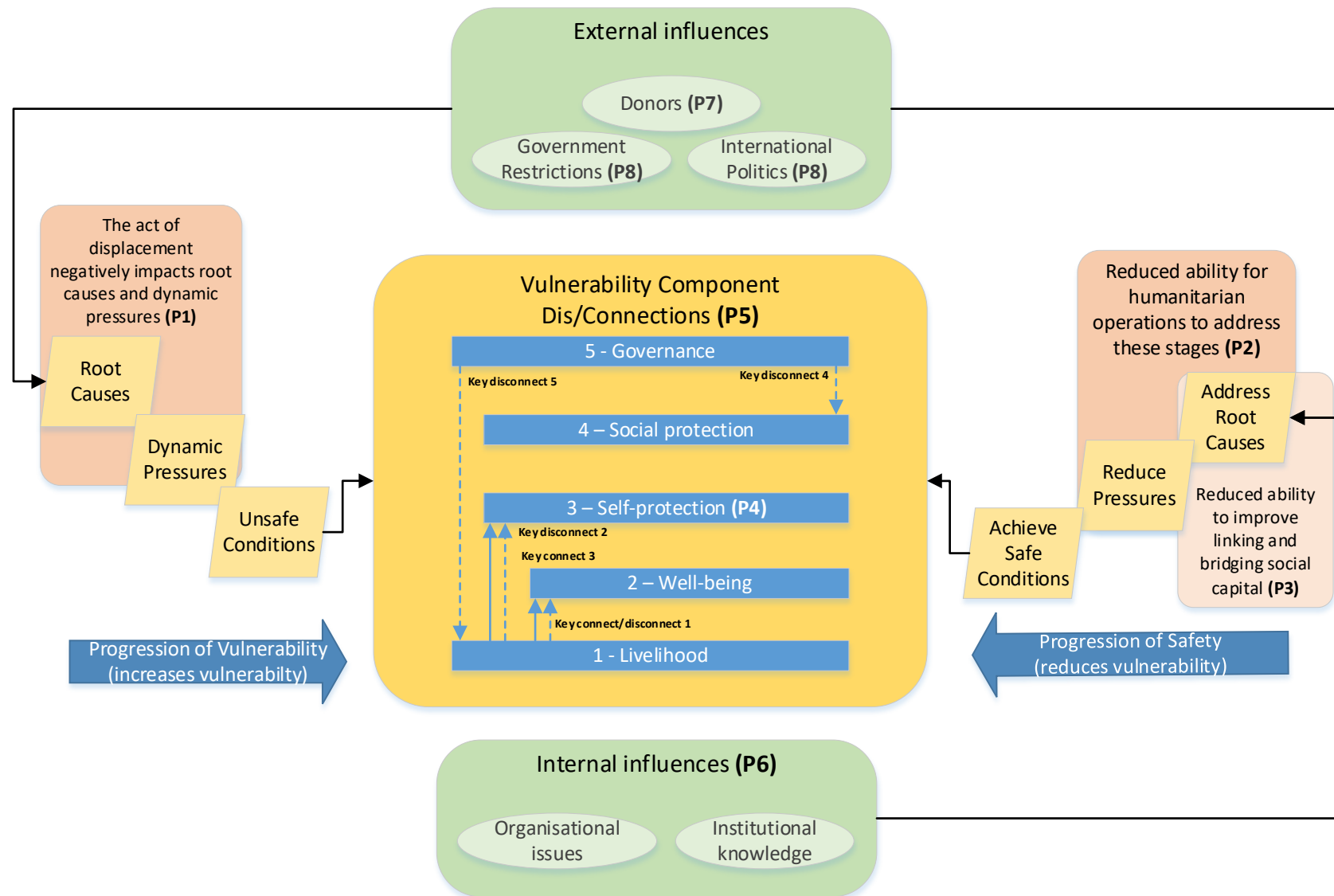
Figure 10: Conceptual framework. Source: Adapted from the PAR model (Wisner et al., 1994), and Cannon's five components of vulnerability (Cannon, 2008a)

The left side of the model shows the stages in the progression of vulnerability. The first of these stages is *root causes*, and this includes all the distant sources of vulnerability. The 'distance' is not limited to spatial distance, but also includes temporal distance (events in past history) or sources that are considered distant because cultural assumptions, ideology, and social relations cause the drivers of vulnerability to go unnoticed. The *dynamic pressures* are processes or activities that remove the 'distance' of root causes and translate them into unsafe conditions. Dynamic pressures could include violent conflict, rapid urbanisation, epidemic disease, or deforestation. *Unsafe conditions* are the forms in which the vulnerability of a population is expressed in relation to a specific hazard. This could include having to live in a hazardous location, having inadequate food entitlements or lacking protection from the state (Wisner et al., 1994). The root causes and dynamic pressures are proposed to be significantly impacted by the process of forced displacement. These impacts are indicated in the model with the peach shaded rectangle on the left-hand side. Although unsafe conditions are sometimes negatively affected by displacement, they are not as inherently impacted as in the other phases. The inverse of the progression of vulnerability is the progression of safety, shown on the right-hand side of the model. In the original PAR model, these two progressions are shown as separate models; however, for simplicity, they are combined in this conceptual model. In table 3 and in the propositions it is shown how the ability to address root causes, and reduce pressures is limited for humanitarian organisations working with displaced populations. This is shown in the model with the second peach rectangle on the right-hand side.

The middle section is drawn from Cannon's (2008a) five components of vulnerability. Most importantly, it shows the five key connections/disconnects which can be seen as points of

opportunity for improving the reduction of vulnerability. The key connections/disconnects
are as follows:

- Key connection/disconnect 1 – Income and subsistence provision
- Key disconnect 2 – Household assessment of risk depends on culture and non-hazard priorities
- Key connection 3 – Spending and resource availability
- Key disconnect 4 – Bad governance leads to poor social protection
- Key disconnect 5 – Unequal income and asset distribution

Livelihood strength and social protection are two crucial factors that are heavily influenced by governance. The sufficiency and resilience of a person's livelihood serves as the foundation for determining their level of vulnerability. The strength of their livelihood also plays a significant role in determining their wellbeing and ability to protect themselves. The distribution of different livelihoods among different groups is shaped by the governance framework in place. Governance also has an impact on the distribution of income and assets, which in turn affects the chances of success for different livelihoods. Social protection is also closely linked to governance, including the role of civil society organisations. Studies have shown that in some countries, NGOs and other groups have greater opportunities to provide protection where the government falls short, while in others, such efforts may be met with opposition. The top and bottom sections show the influence of internal and external factors. These are derived from the literature on humanitarian operations in refugee crises. It demonstrates how these factors primarily influence the root causes in the progression of safety and vulnerability. Each of the propositions are represented within the conceptual model as **P#** and are detailed in subsequent section.

2.7   Propositions from the Literature

As this study uses abductive reasoning, the literature review is used to form propositions based on the relationships between the bodies of knowledge. These propositions are further explored through the interviews and data analysis. The propositions are revised utilising the insight from the interviews and are presented in the .

Proposition 1 – *Humanitarian projects for displaced populations tend to focus primarily on addressing unsafe conditions and mitigating hazards, whilst root causes and dynamic pressures are either a lower priority, or too difficult to address in the political climate.*

Humanitarian projects for displaced populations are often focused on addressing the immediate needs. These needs include providing safe living conditions and mitigating hazards, such as providing shelter, food, and clean water. While these efforts are crucial in addressing the immediate impacts of a disaster, they do not address the underlying causes of vulnerability. The root causes, such as poverty, political instability, or climate change, are often a lower priority or are considered too difficult to address within the current political climate. Similarly, dynamic pressures, which are the ongoing factors that exacerbate the vulnerability of populations, are also given less attention in these types of projects. In other words, it is common to see that humanitarian projects tend to focus more on addressing the symptoms of the problem, rather than the root causes or the ongoing issues that contribute to disaster risk. This is inferred from research into the limitations of humanitarian operations, specifically the priority of short-term needs (Al Adem, 2018; Freeman & Schuller, 2020; Nanthagopan et al., 2019).

Proposition 2 – *The forced displacement context generally does not allow humanitarian actors to address root causes and dynamic pressures. Alternative indicators for success are necessary in the context of forced displacement.*

Forced displacement is a unique situation where people are forced to flee their homes as a result of violence and political instability. In such scenarios, addressing the root causes and dynamic pressures of vulnerability are typically not possible due to the ongoing conflict, the lack of access to affected areas, or the influence of political agendas. This can make it difficult to determine what success would look like in these contexts, as indicators based on the progression of vulnerability may not be relevant or attainable. Due to this, alternative indicators for success in forced displacement situations may need to be developed. Measures that assess the effectiveness of programmes that aim to mitigate the negative impacts of displacement on the affected communities, such as providing livelihood support, education, and protection services to the displaced, as well as local communities hosting them, could be other indicators of success. However, the unknown time span for the needs of refugee camps creates difficulties in programming for these indicators (Karsu, 2019). Moreover, in order to address forced displacement, it is important to develop new indicators that go beyond a narrow focus on the humanitarian aspects of displacement and address the political, economic, and social causes of the displacement and the ongoing conflict.

Proposition 3 – *Social capital is negatively affected following forced displacement, increasing vulnerability. Bonding social capital can remain strong and be fostered through humanitarian work, however, there is difficulty in building both linking and bridging social capital.*

Social capital refers to the networks, norms, and trust that facilitate cooperation within a community. Forced displacement can have a significant impact on social capital, as it can

disrupt these networks and lead to an increase in vulnerability. The disruption of social capital can occur in various ways, such as by breaking up families and communities, by destroying livelihoods, and by creating mistrust and fear. The erosion of social capital is shown in research by Rugumamu and Gbla (2003) and by Seneviratne and Amaratunga (2011). However, despite the negative impacts of displacement, it is not always the case that social capital is completely destroyed. Bonding social capital, which refers to the social ties within a group, can often remain strong and be fostered through humanitarian work. For example, providing assistance and protection to the displaced population can help maintain social cohesion and provide a sense of community. However, building both linking and bridging social capital, which refer to the ties between different groups, can be more difficult, especially in the context of forced displacement. This type of social capital is essential for building trust, cooperation, and mutual understanding between different groups, such as between the displaced population and the host community. In situations of forced displacement, there can be mistrust and fear between these groups, which can make it difficult to build these ties. Moreover, displacement may cause people to lose previously existing ties, so building new ones becomes difficult, a gap that humanitarian projects may have difficulty bridging as well. Therefore, rebuilding social capital and fostering cooperation between different groups can be a complex and challenging task that requires a holistic and multi-disciplinary approach, not just in the short-term response but in the long-term recovery and reintegration process.

Proposition 4 – *Self-protection (income and resources used to protect against known hazards) is significantly reduced following forced displacement. Household assessment of risk is low with many non-hazard priorities present, and spending and resource availability is reduced following displacement.*

Self-protection is the use of income and resources to protect oneself and one's household against known hazards. Forced displacement can have a significant impact on self-protection, both in terms of reducing the resources available for protection and by altering risk perception. Displacement may lead to a loss of assets and income, leading to a decrease in the ability of households to protect themselves from hazards (Ibanez & Moya, 2010). Additionally, displacement may cause changes in the household's assessment of risk, as they may have to prioritise other basic needs over self-protection. When assessing risk, many non-hazard priorities may be present. For example, households may prioritise their basic needs such as food, shelter, and healthcare over protecting themselves from hazards. Additionally, during displacement, spending and resource availability may be reduced, which can affect the key components of the vulnerability model. This means that the ability of households to access information, manage risk, and adapt to changing circumstances may be reduced, further exacerbating their vulnerability. Therefore, addressing self-protection in the context of displacement requires a multi-dimensional approach, taking into account not only the physical hazards, but also the social and economic factors that shape the household's vulnerability. This means providing support in the form of cash, food, and other basic needs, as well as addressing the livelihoods and economic needs of the affected population. It also means providing information and education to the displaced population about how to protect themselves and manage risk during displacement and supporting the development of the affected communities in the long-term.

Proposition 5 – *All components of vulnerability from Cannon's model are adversely affected following forced displacement and the key connections/disconnects compound this impact.*

Displacement, as a result of disasters or conflict, can have a significant impact on all components of vulnerability as outlined in Cannon's five components of vulnerability model (Cannon, 2008b). These components are exposure, sensitivity, and lack of coping capacities, adaptive capacities and resilience. Exposure is the physical presence of hazards and the likelihood of these hazards affecting a community. Displacement often increases exposure, as people may be forced to move to areas that are more prone to hazards. Sensitivity refers to the degree to which a community is affected by a hazard. Displacement can increase sensitivity by breaking up families and communities, destroying livelihoods, and creating mistrust and fear, which can lead to increased vulnerability (Seneviratne & Amaratunga, 2011). Lack of coping capacities refers to the ability of a community to respond to and recover from a hazard. Displacement can reduce coping capacities by reducing access to resources and limiting the ability of the community to respond to and recover from a hazard. Adaptive capacities, refers to the ability of a community to adapt to long-term changes, such as climate change. Displacement can reduce adaptive capacities by limiting access to resources and limiting the ability of the community to make long-term changes that would make them less vulnerable. Resilience is the ability of a community to absorb shocks and recover from hazards. Displacement can reduce resilience by limiting access to resources, disrupting social networks, and limiting the ability of the community to recover from a hazard. All these components of vulnerability are interconnected and if one of them is affected it may have a knock-on effect on the others. Therefore, it is important to note that when addressing vulnerability in the context of displacement, it is essential to focus on the key connections and disconnects between these components in order to reduce vulnerability in a comprehensive and holistic way. This means prioritising interventions that address the

immediate needs of the affected population and also supporting long-term recovery and reintegration efforts.

Proposition 6 – *Low levels of institutional knowledge due to high turnover in the humanitarian sector negatively affects organisations' ability to improve vulnerability reducing activities.*

The humanitarian sector is characterised by a high turnover of personnel and organisations, which can lead to a lack of institutional knowledge and continuity of efforts. This lack of institutional knowledge can negatively affect the capacity of organisations and individuals to improve disaster vulnerability reduction activities over time. The high turnover of personnel and organisations in the humanitarian sector means that there is a constant influx of new people and organisations, with little time to establish effective working relationships and transfer knowledge (Huck et al., 2011). This can lead to a lack of continuity in the implementation of disaster vulnerability reduction activities, as new personnel and organisations may not have the necessary knowledge and skills to continue the work of their predecessors. Additionally, the lack of institutional knowledge can also lead to the duplication of efforts and the reinvention of the wheel, as new personnel and organisations may not be aware of previous efforts and successes (Scott, 2014). This can lead to a waste of resources and a lack of progress in reducing vulnerability. Furthermore, the lack of institutional knowledge can also lead to a lack of accountability, as new personnel and organisations may not be aware of previous commitments and agreements. This can lead to a lack of trust and cooperation between different actors in the humanitarian sector, which can hinder progress in reducing vulnerability. Therefore, it is important for the humanitarian sector to prioritise the transfer of institutional knowledge and continuity of efforts, as well as efforts to retain personnel and organisations in order to improve the effectiveness of disaster vulnerability

reduction activities over time. This could be achieved through mentoring programmes, regular knowledge-sharing sessions and creating opportunities for continuity of experience in the sector (Ontko et al., 2007).

Proposition 7 – *Donors can negatively influence an organisation's ability to reduce the disaster vulnerability of displaced people in the long-term.*

Donors play an important role in funding humanitarian efforts, including those aimed at reducing disaster vulnerability among displaced populations. However, the way in which donors provide funding and resources can negatively influence an organisation's ability to reduce the disaster vulnerability of displaced people. One way in which donors can negatively influence an organisation's ability to reduce disaster vulnerability is by providing short-term funding for quick response efforts, rather than longer-term funding that is necessary for more comprehensive, sustainable solutions. It is often the case that funding requirements are given priority over the needs of the beneficiary (Freeman & Schuller, 2020). This can result in organisations focusing on immediate needs, rather than addressing underlying causes of vulnerability, and can make it difficult to implement long-term strategies that are necessary to reduce disaster vulnerability over time. Another way in which donors can negatively influence an organisation's ability to reduce disaster vulnerability is by imposing rigid requirements on how funding should be used. This can limit an organisation's ability to respond to changing circumstances and adapt to the specific needs of the affected population. It can also result in organisations diverting resources away from essential activities to comply with donor-imposed requirements. Additionally, donors can negatively influence an organisation's ability to reduce disaster vulnerability by imposing unrealistic expectations for outcomes, which may not be achievable within the given resources or in the

specific context. This can result in organisations spreading themselves too thin, or focusing on the wrong priorities, which can hinder progress in reducing vulnerability (Al Adem, 2018). Furthermore, the way in which donors engage with organisations can also affect the ability of organisations to reduce disaster vulnerability. For instance, if donors provide a large amount of funding but do not provide support and resources, organisations may struggle to effectively implement their projects. Therefore, it is important for donors to provide funding in a way that supports the ability of organisations to reduce disaster vulnerability among displaced populations, by taking into account the specific context, supporting long-term and flexible approaches, as well as providing necessary resources and support and aligning their expectations and funding with the realities of the field (Zarnegar-Deloffre, 2016).

Proposition 8 – *Government restrictions and international political agendas affect organisations' ability to reduce the disaster vulnerability of displaced people in the long term.*

Government restrictions and political agendas can significantly affect an organisation's ability to reduce the disaster vulnerability of displaced people. These restrictions and agendas can come in many forms, such as restrictive laws, regulations, and policies that limit the ability of organisations to provide assistance and protection to displaced populations (Christensen & Weinstein, 2013). One way in which government restrictions and political agendas can affect an organisation's ability to reduce disaster vulnerability is by limiting access to affected areas. This can occur when governments restrict or deny access to organisations, which can make it difficult for organisations to provide assistance and protection to displaced populations. Another way in which government restrictions and political agendas can affect an organisation's ability to reduce disaster vulnerability is by imposing limitations on the types of assistance and protection that can be provided. For example, governments may impose

restrictions on the distribution of certain types of aid, such as food or medical supplies, which can limit an organisation's ability to meet the basic needs of displaced populations (Sullivan, 2021). Additionally, government restrictions and political agendas can also affect an organisation's ability to reduce disaster vulnerability by limiting their ability to work with certain groups or communities. For instance, organisations may be restricted from working with certain ethnic or religious groups, which can limit their ability to provide assistance and protection to these groups. Furthermore, these restrictions can also affect an organisation's ability to reduce disaster vulnerability by hindering their ability to advocate for the rights and needs of displaced populations. For example, governments may impose restrictions on freedom of speech and assembly, which can limit an organisation's ability to speak out against human rights abuses or advocate for the needs of displaced populations.

2.8   Chapter Summary

This chapter provided a comprehensive literature review that explored the intersection between disaster vulnerability and humanitarian response operations in the context of forced displacement. The review was divided into two main sections: the first section examined the literature related to disaster vulnerability. The second section focused on the literature related to humanitarian response operations that are implemented to assist displaced populations. This knowledge is used to create a conceptual framework and propositions that guide the data analysis. Ultimately, the literature review serves as the foundation for the research question and research design and provides background information for the entire research project. The next step is to describe a methodology that will facilitate answering the

research question. The following chapter will describe the research design, data collection

methods, and data analysis procedures that will be used to conduct the study.

Chapter Three – Methodology

3.1   Introduction

This chapter describes the methodology of the study, including the philosophical standpoint that informed the research design. Additionally, it provides a justification and assurance of validity for the chosen methodology, method of data collection, and analysis of the data.

A qualitative approach was taken to answer the research question and better understand the influence humanitarian organisations have over the disaster vulnerability of displaced people. The qualitative research design uses abductive reasoning to create propositions to guide further investigation into the problem. Abductive reasoning aims not to test or create theory, but rather to find the best answer with incomplete knowledge and propose new ideas to be further explored. The literature review is used to create a conceptual framework from the two bodies of knowledge and create propositions to guide the analysis and discussion of the study. Participants were then engaged in the study to explore these propositions further through interviews. Thirty-two participants were selected from humanitarian organisations working in the Cox's Bazar region of Bangladesh as part of a single phenomenological case study. The data were collected through semi-structured interviews with these participants. Additional field notes were taken during the three months that the researcher was embedded within the field. The data were then analysed using Creswell's (2013) procedure for analysis through provisional and structural coding, describing and connecting themes that emerged. This thematic analysis utilises the software, Nvivo, to aid with the coding and organisation. The following sections provide the details of the research strategy, research method, research approach, methods of data collection, sample selection, ethical considerations, and the limitations of the project.

3.2   Research Philosophy and Epistemological Stance

Creswell (2009) proposes that the identification of world views is the pivotal first step in research design. The world view of a researcher can be described in the terms of ontology, epistemology, and research paradigm. Ontology relates to the researcher's fundamental interpretation of the conception of reality and the question of existence. In broad terms, a researcher's ontological position can be defined as either objective or constructive. An objective ontological position being *"an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors" (Bryman, 2015, p. 21)*. Whereas a constructive ontological position is one that *"asserts that social phenomena and their meanings are continually being accomplished by social actors. This implies that social phenomena and categories are not only produced through social interaction but are in a constant state of revision"* (Bryman & Bell, 2011, p. 21). Epistemology describes the researcher's assumptions relating to human knowledge. An epistemological standpoint will identify how the researcher views the creation of knowledge and how reality is measured or interpreted. Defining the ontological and epistemological position is pivotal in designing an appropriate research methodology. The researcher's belief concerning the reality of a phenomenon (ontological view) will directly affect the manner in which knowledge can be created about the phenomenon (epistemological view), which affects the processes of inquiry and methodology (Scotland, 2012).

A constructivist paradigm is particularly useful for research in this field because it allows for the examination of the social and cultural factors that shape the experiences and perceptions of displaced people and their vulnerability to disasters. This approach recognises that knowledge is not simply discovered, but rather constructed through the social interactions

and experiences of individuals and groups. One important aspect of this is understanding how displacement itself is a socially constructed phenomenon that is shaped by political and economic factors. Displacement can be caused by a variety of factors, such as war, persecution, and disasters, but it is also influenced by political and economic systems, such as policies and regulations that determine who has the right to access land and resources. A constructivist perspective allows for an examination of how these factors contribute to the experiences of displacement and the vulnerability of displaced people. Additionally, a constructivist paradigm allows for the examination of the ways in which humanitarian workers and communities understand and experience vulnerability. This includes understanding how their perceptions and understanding of vulnerability are shaped by their cultural and social backgrounds, and how these perceptions influence their actions and decision making. This approach allows for a more nuanced understanding of how humanitarian workers and communities understand and experience vulnerability, which in turn, can contribute to the development of more effective strategies to reduce vulnerability. Another important aspect of this field is understanding the role of power dynamics in shaping vulnerability. A constructivist perspective allows for examination of how political and economic systems shape the vulnerability of displaced people. This includes understanding how access to resources, such as land and housing, is determined by political and economic systems and how these systems shape the experiences of displacement and vulnerability. Additionally, it also allows for examination of how social and cultural factors such as gender, race, and ethnicity shape the experiences of displacement and vulnerability.

The belief system and worldview of the researcher which guides this methodology fall within the constructivism paradigm. This paradigm is based around a relativist ontology and accepts that reality is only subjective and hence should be investigated through interpretation

(interpretivism). It is an appropriate worldview for qualitative research where the researcher is positioned within the context. It allows for open-ended questions and emerging approaches. This brings personal values into the study and collects participant-generated meanings (Andrew et al., 2011). Unlike positivism, a competing paradigm, constructivism does not accept that only one single truth exists; rather, all truth is considered to be relative and constructed by society or the individual (Denzin & Lincoln, 2008). It assumes that the human condition is a result of dynamic social, political, and environmental conditions that influence choice and behaviour, and it is not possible to interpret this by quantitative methods. This is appropriate, as studies on disaster vulnerability are concerned with social aspects that cannot be fully understood through an objective lens. Table 4 below shows how the research paradigm for this study (highlighted in yellow) is best suited to the methodology and methods adopted. The method, methodology, and theoretical perspective are all aligned under this paradigm.

Table 4: Research paradigms. Author supplied, adapted from (Crotty, 1998)

Paradigm	Ontology	Epistemology	Theoretical Perspective	Methodology	Method
Positivism	There is a single reality or truth	Reality can be measured and hence the focus is on reliable and valid tools that obtain that	Positivism Post-positivism	Experimental research Survey Research	Usually quantitative, could include: Sampling Measurement Statistical analysis Questionnaire Focus Group Interview
Constructivist	There is no single reality or truth. Reality is created by individuals in groups	Therefore, reality needs to be interpreted. It is used to discover the underlying meaning of events and activities	Interpretivism (reality needs to be interpreted) Phenomenology Symbolic Interactionism Hermeneutics Critical Inquiry Feminism	Ethnography Grounded theory Phenomenological research Heuristic inquiry Action research Discourse analysis Feminist standpoint research	Usually qualitative, could include: Qualitative interview Observation Participant Nonparticipant Case study Life history Narrative Theme Identification

Subjectivism	Reality is what we perceive to be real	All knowledge is purely a matter of perspective	Postmodernism Structuralism Post-structuralism	Discourse theory Archaeology Genealogy Deconstruction	Autoethnography Semiotics Literary analysis Pastiche Intertextuality
Pragmatism	Reality is constantly renegotiated, debated, interpreted in light of its usefulness in new unpredictable situations	The best method is one that solves problems. Finding out is the means, change is the underlying aim	Deweyan pragmatism Research through design	Mixed methods Design-based research Action research	Combination of any of the above and more, such as data mining, expert review, usability testing, physical prototype

The epistemology underpinning this paradigm accepts that knowledge is constructed, and the study aims to interpret the underlying meaning of events and activities. This research paradigm is appropriate for the chosen topic as the study deals with qualitative data obtained from various viewpoints influenced by personal experience. Additionally, constructivism allows for abductive reasoning as it allows the researcher to generate propositions with incomplete information and explore this further through subjective experiences and meanings that individuals attach to their experiences. Although reality is independent of human beliefs, the underlying meaning and knowledge is always a human construction (Crotty, 1998). The method focuses on real world problems and tends toward changes in practice. Hence, the axiology of the research is value bound and aims to not only understand the problem but to influence change.

3.3   Research Design

In broad terms, the research design adopts a qualitative research method. Compared to quantitative methods, this offers a more complete description and analysis of the subject without limiting the scope of the research (Collins & Hussey, 2003). Qualitative research can

provide a realistic feel for the situation that cannot be experienced in numerical data and statistical analysis (Boodhoo & Purmessur, 2009). The qualitative approach accepts that the human condition is influenced by dynamic perceptual, economic, political, social, and environmental conditions and hence cannot be interpreted by quantitative means. Non-numerical data allows researchers to better understand the quality and nature of people's actions, practice and comprehension (Hamza, 2014). More specifically, the research will take a phenomenological approach by acquiring knowledge based on the experiences of participants within a specific context.

This study utilises a phenomenological case study, which is described by Yin (2009) as a useful way of answering exploratory research questions and providing in-depth understanding of a phenomenon within a specific context. The purpose of phenomenological research is to gain an understanding of the structure, nature, and meaning of the lived experiences of people(s) regarding a specific phenomenon (Silverman, 2013). Through this approach, the researcher describes the participants' lived experience with the phenomenon and groups their statements into significant units and themes to describe the phenomenon through an external lens (Moerer-Urdahl, 1994). This approach is suitable for this research project because it allows for an in-depth examination of the lived experiences of people working in the field. The case study approach allows for the examination of a specific, real-life situation in order to gain a deep understanding of the phenomenon under study. The case study approach allows for the examination of the complex, dynamic, and unique aspects of the phenomenon under study, which is particularly important when studying humanitarian practitioners responsible for reducing disaster vulnerability. Additionally, the use of a single case study allows for the collection of rich, detailed data that can provide a comprehensive understanding of the experiences and perceptions of the participants. The use of a single case

study allows for the examination of the phenomenon in its natural setting, which can provide valuable insights into the experiences of the participants in this specific response. This approach allows for the examination of the complexity of the phenomenon, rather than simplifying it, as it allows for the examination of the specific context and its impact on the experiences of the participants.

The researcher uses an abductive research approach, which combines elements of both inductive and deductive research. It allows for the incorporation of theoretical influence in collecting data, ensuring that findings are grounded in existing knowledge as well as guided by empirical discovery (Thompson, 2022). It is well-suited to the field of disaster vulnerability, as it allows for the identification of patterns and relationships in the data while also allowing for the generation of new hypotheses and theories. Hence, results will be discovered through identifying patterns in the literature, creating premises, and testing the premises through observation. Abductive reasoning aims to address some of the shortcomings of deductive and inductive reasoning (Awuzie & McDermott, 2017). For example, the deductive approach can be criticised for a lack of clarity of how to select theory to be tested via formulating hypotheses. Conversely, the inductive approach is criticised as no amount of empirical data will necessarily enable true theory-building (Saunders, 2012). This dilemma can be resolved through an abductive approach which allows the researcher to engage in back-and-forth movement between theory and data to inform the creation or modification of theory (Blaikie, 2009; Bryman, 2012; Saunders, 2012). Deductive reasoning goes from a general rule to a specific conclusion (always true), inductive reasoning will go from a specific observation to a general conclusion (may be true), whereas abductive reasoning will go from incomplete observations to best prediction (may be true) (Bryman, 2015).
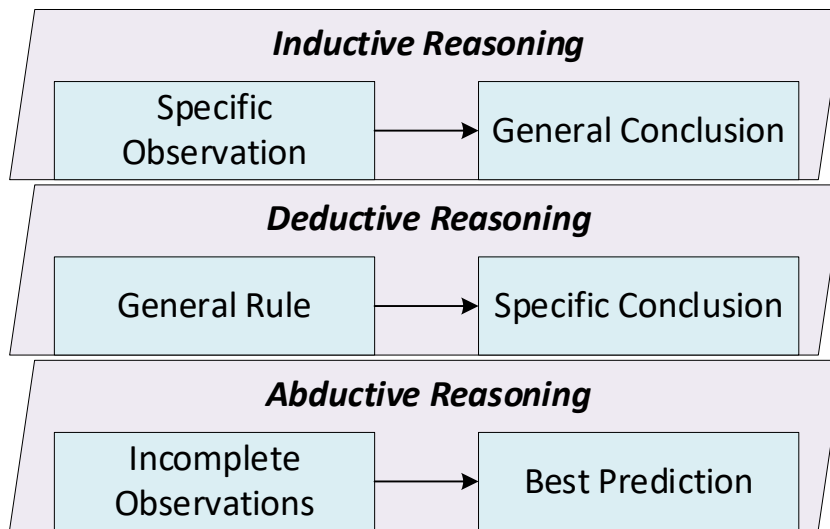
Figure 11: Abductive, deductive and inductive reasoning. Author supplied, adapted from Bell et al. (2018)

In following the abductive approach, the researcher aims to determine the best explanation from many alternatives in order to explain problems identified at the start of the research process. In relation to this study, the abductive approach takes a structure adapted from Awuzie and McDermott (2017). The structure is as follows: the researcher's observation of a particular phenomenon; the development of a proposition based on the observation; exploration of literature and theory in an attempt to find the best explanation of the proposition; use of deductively and inductively sourced data in validating the proposition; creation of knowledge based on this validation.

The data are sourced through semi-structured interviews to allow for variety in the participants' response, while still being informed by the conceptual framework and meeting the research aim. Dunn (2000) suggests that one of the key benefits of semi-structured interviews is that they have a predetermined order but ensure flexibility in the way issues are

addressed by the interviewee. This type of interview allows relevant topics to be identified by respondents rather than the researcher. The less formal structure provides a unique aspect of stakeholder engagement where the respondent not only provides information but receives information through conversation with the researcher (Crang, 2002). The relationship between the topics and issues raised by the participants provide a basis for unique questions that the researcher did not prepare in advance (Eyles, 1988).

Additionally, interviews with experts and practitioners are used rather than with the refugees or community members. This is the most effective way to answer the research question and is more meaningful, as the practitioners are in a better position to affect change in the vulnerability of the refugees. However, an added benefit of interviewing practitioners and experts is to overcome the difficulty of 'generalising' the findings from a case-study approach for a wider population. Although generalisability is not the main purpose of qualitative research (Myers, 2000) or may not even be possible (Lincoln & Guba, 1985), Patton (2002) suggests that we could instead use the term *"extrapolations … modest speculations on the likely applicability of findings to other situations"* (p. 584).

The research method can be divided into three broad stages. The first stage is guided by the first research objective and involves a traditional literature review in order to develop a conceptual framework to guide the research. The second stage aligns with the second research objective and involves collecting primary data through semi-structured interviews with humanitarian practitioners. The questions are guided by the conceptual framework and are aimed at understanding the effectiveness of disaster vulnerability reduction in humanitarian projects in the area. The third stage will address the third research objective through an analysis of the data. The data obtained from the interviews will be coded (through

codes, themes, and categories) and analysed using Lumivero's NVivo software. This program effectively manages unstructured information and will help to access ideas and concepts from the data. Additionally, quotes will be extracted from the interviews to represent wider themes from the data. The results derived from the primary data along with knowledge from an extensive literature review will answer the research question and help to develop propositions to improve disaster vulnerability reduction practices in the area. A visual representation of the study design was presented in section 1.8 through *figure 1*.

3.4   Data Collection Method and Tools

The study includes 32 interviews with humanitarian staff working in Bangladesh in response to the Rohingya refugee crisis. This study utilises a purposive sampling (non-random) to identify and select the participants; this is suitable for complex phenomenon relating to lived experiences and behaviour (Kumar, 2014). Through purposive sampling, we are able to include participants who can share the best information based on their experience with the phenomenon. The selection of the participants is based on the judgement of the researcher and guided by the research aim and objectives (Groenewald, 2004), whilst also requiring experience and knowledge regarding the investigated phenomenon (Creswell, 2013).

Potential participants are required to be over the age of 18 and to have been working on the refugee crisis for longer than three months. This ensures that the interviewee is adequately acquainted with the situation. This requirement of experience was not extended beyond three months as there is a high level of staff turnover in this field and excluding employees with less than a year's experience would not accurately reflect the situation. The study includes participants from Bangladesh and other countries to allow for multiple perspectives.

Each interview has a duration of approximately 60 minutes, with some extending up to 90 minutes. Given the length and focus of the interviews, the sample size proved sufficient to meet the research aim. In interview-based studies, the sample size is often justified by the number of participants required to meet 'data saturation' (Francis et al., 2010). This can be achieved through setting a minimum sample size for an initial analysis and then specifying how many more participants can be included without new ideas emerging. This can often be achieved in fewer interviews than 32. In a study by Guest et al. (2006) a set of 60 interviews were used, however it was concluded that saturation occurred after 12 interviews. Some studies reported to have reached data saturation in as little as six interviews (Isman, Ekéus, et al., 2013; Isman, Mahmoud, et al., 2013). There are no accurate methods or guidelines to help create an estimation and each study will have a unique saturation point. Hence, this study evaluated the suitability of the sample size following the preliminary analysis.

The interview audio was recorded using a voice recorder and initially transcribed verbatim after the fact. A digital transcription service, TEMI, was used for the preliminary transcription. The transcripts were then checked for accuracy and edited by the researcher applying naturalisation to the transcripts. Real names were replaced with pseudonyms at this stage. Naturalisation was applied to the transcripts following the verbatim transcription for three main reasons. Firstly, clarity and readability, Naturalised transcripts are more reader-friendly and easy to understand because they eliminate non-essential non-verbal cues such as "um" and "ah" and filler words that do not add to the meaning of the conversation. This improves the readability of the transcripts. Second, it provides emphasis on the meaning behind the words, rather than the words themselves. This can be particularly useful in this field, where the focus is on understanding the experiences, perceptions, and beliefs of the participants, rather than documenting every single word that was spoken. Finally, it allows for better

understanding of the data, as using naturalisation allows the researcher to focus on the essential ideas and information provided by the participants, which helps to eliminate irrelevant information and improves the researcher's understanding of the data.

Semi-structured interviews can be interpreted in a number of ways. An unstructured interview has no fixed sequence, questions, or interviewer behaviour, whilst a structured interview has fixed questions and a fixed sequence and interviewer behaviour. However, a semi-structured interview could include any combination of these attributes. The semi-structured format allows for deviation and exploration of unexpected topics that may arise during the interview, providing a more open-ended and dynamic approach to data collection. This allows the researcher to follow up on interesting or important themes that may not have been anticipated in the initial research design and therefore gather more complete and nuanced information about the research topic. Additionally, this method allows for the collection of rich and detailed data by providing the opportunity for the participant to speak in their own words and elaborate on their thoughts and experiences. Semi-structured interviews can provide valuable insights into the participants' perspectives and experiences that may not be captured through other research methods. The researcher can also probe deeper into certain topics or follow up on specific responses, which can lead to more detailed and rich information. Furthermore, semi-structured interviews enable the researcher to adapt to the participant's needs. For example, if the participant does not understand a question, the interviewer can rephrase it, which can improve the quality of data collected. Additionally, if the participant is not comfortable answering a question, the interviewer can move on to another question, which can help to create a more comfortable and relaxed environment for the participant. The semi-structured format also provides the researcher with control over the data collection process. While allowing the participant to speak freely,

the researcher can guide the conversation, ensuring that they obtain the data they need while still allowing the participant to share their own experiences and perspectives. This can help to ensure that the researcher can gather a wide range of information on the research topic.

This study uses a set of guiding questions to lead the interviews. Based on the expertise and early responses during the interview, the researcher expanded on the guiding questions and altered the structure of the interview. The interviewer behaviour remained consistent throughout the interviews.

The questions that guide the semi-structured interviews aim to shed light on the effectiveness of vulnerability reduction in the humanitarian sector in response to the Rohingya refugee crisis. The interview questions are intentionally written using clear and accessible language. The questions are divided into categories that forms an interview checklist. The checklist is not intended to be strictly adhered to, but to be adapted to match the conventions and understanding of the participants. If the interviewee is uncomfortable or reluctant to speak about a certain topic, then they are not pushed and instead are encouraged to discuss a topic they are more comfortable with. Some examples of the questions that guide the interviews are shown in table 5.

Table 5: Sample questions for semi-structured interviews

Question	Reference
What is the level of preparedness and emergency response capacity and how does the humanitarian sector impact this?	(Birkmann et al., 2013)
How do humanitarian projects impact the development level of communities in terms of	(Birkmann et al., 2013)

quality of life, welfare, urban planning and economic health?

What measures are in place to ensure camps (formal and informal) are not positioned in a hazardous location?	(Birkmann et al., 2013)
Are there measures in place to manage the distribution of power and ensure there is not further marginalisation within the communities?	(Wisner et al., 1994)
Can you explain how you monitor your projects relating to disaster vulnerability? Such as, what indicators are used and over what time span?	(Welle et al., 2013)
How do humanitarian interventions, such as providing shelter, food, and medical care, address the unsafe conditions and vulnerability of displaced people?	(Wisner et al., 1994)
In your experience, what are some of the challenges in addressing the root causes of vulnerability of displaced people?	(Wisner et al., 1994)
Can you describe the role of history and context in shaping the vulnerability of displaced people?	(Cannon, 2008a)
In your opinion, how can humanitarian organisations better address the root causes and dynamic pressures of vulnerability?	(Wisner et al., 1994)

3.5   Study Site Justification

Common drivers of vulnerability include population growth, rapid urbanisation, and unplanned land use (Comfort et al., 1999). These causes are apparent in the Cox's Bazar refugee camps and are contributing to an increasingly vulnerable population. The people within these camps are lacking basic infrastructure, job opportunities, food and water security, freedom of movement and access to resources (including health and medicine). The crisis is widespread across several camps in the southern areas of the Chittagong division; however, a majority of the humanitarian agencies are operating out of the city of Cox's Bazar. There are approximately 1.1 million Rohingya refugees in Bangladesh and the camps within this region contain 880,133 refugees, including 94,906 refugees already living in the region before the 2017 influx (UNHCR, 2020). The Rohingya refugee crisis is a suitable case study for researching the vulnerability of displaced people due to the scale of displacement and the complex vulnerability factors that have contributed to the displacement and ongoing vulnerability of the Rohingya people. The crisis is ongoing, which means that it is possible to understand how different interventions and policies have affected their vulnerability. Additionally, the Rohingya people are facing a combination of natural and human-induced hazards which makes the study of their vulnerability particularly complicated. Their displacement was caused by a complex interplay of political, economic, and social factors and the refugees are facing the challenges of living in overcrowded, under-resourced refugee camps with poor sanitation and inadequate infrastructure, which also exposes them to natural hazards such as monsoon floods, landslides, and cyclones. Furthermore, the Rohingya refugee crisis has received significant international attention, which means that there is a wealth of information and data available on the case study, and the findings of research on the Rohingya refugee crisis can have significant policy and practical implications. The

background information is provided in <u>chapter 4</u> to provide context to the data analysis and discussion.

3.6   Data Analysis Procedure

The data obtained from the interviews is coded and analysed using Lumivero's NVivo software. This program effectively manages unstructured information and helps to access ideas and concepts from the data. The software allows for advanced search queries and identification of common and divergent themes in large interview transcripts.

The study utilises thematic coding to organise the data. Thematic coding is a form of qualitative analysis by which passages within the transcripts are indexed into specific categories to form a framework of thematic ideas (Gibbs, 2007). This particular form of thematic analysis is known as the framework method for analysis and has been used successfully since the 1980s (Ritchie & Lewis, 2003). The framework method is suitable for thematic analysis of interview data and is an effective tool as it provides a systematic model for managing and mapping the data (Gale et al., 2013).

Coding can take place on three different levels, by description, categorisation and analytical. Descriptive coding can be useful, especially in the earlier stages of analysis. It helps to identify the particular activities to make basic comparisons. However, categorisation allows for higher level analysis by grouping these descriptions into broader concepts. Furthermore, analytic codes allows for interpretation of the interview and produces codes informed by the broader context and literature (Gibbs, 2007). These are all examples of data-driven coding, where the themes are identified through studying the transcripts. However, this study combines data-driven coding with concept-driven coding, which is where some of the themes are

predetermined and identified from the literature. The thematic coding organises the data to allow for several types of analysis, such as interpretative phenomenological analysis, template analysis, and framework analysis.

The transcripts from the interviews are coded by identifying any relevant terms and grouping these into categories or themes. Their relevance is determined based on whether it relates to a theory or concept, if it relates to key literature, if it is repeated in several places or if the interviewee explicitly states that it is important. It is the relationship among these themes that forms the discussion of the research. The details of the analytic framework, including the codes, categories and themes, is provided in section 5.2.

The results derived from the primary data along with knowledge from the literature review answers the research question and helps to develop propositions to improve practices to reduce vulnerability in the area.

3.7   Validity and Reliability of the Study

The validity of a qualitative study is determined based on the degree to which the contribution to knowledge is aligned to the participants' construction of reality. This is not a universally agreed upon concept and each researcher will have their own perception on what is considered valid research. The researcher will need to determine their own minimum standards in relation to quality, rigor and trustworthiness (Golafshani, 2003). Throughout this study, measures were taken to ensure the validity of the research during the interview process, coding process and data analysis. Interview questions were asked in plain language and participants were encouraged to provide an explanation of their views to ensure that the

researcher's interpretation is correct. The coding and analysis process is undertaken in stages and alternative explanations are sought to help confirm interpretations (Gibbs, 2007).

The reliability of a study is the extent to which the findings are consistent over time and if they are replicable under a similar methodology (Patton, 1999). Reliability can be challenged at many stages of the research in the form of uncertainty due to bias or by participants answering based on influence rather than experience (Kvale, 2007). In order to demonstrate reliability, it is important to rule out these sources of uncertainty. In the interview process, bias was limited by avoiding leading questions and instead asking neutral questions so as to not influence the participants.

Through the analysis of the data, it is possible for researchers to make differing interpretations depending on their individual backgrounds and theoretical orientations. These varying perspectives on phenomena are not inherently examples of unreliable research, although it is necessary to use triangulation to mitigate reliability issues (Patton, 1999). Triangulation is a qualitative research strategy used to ensure validity through the convergence of information from various sources (Carter et al., 2014). Data source triangulation is used in this study by collecting data from different types of people through in-depth individual (IDI) interviews (Fontana, 2000). This is supported through method triangulation, which involves the confirmation of interpretations through observation and field notes (Polit, 2012).

3.8   Ethical Considerations

It is important for every researcher to consider the ethical implications of each research project they undertake. All research inherently presents some level of risk. The researcher

should aim to mitigate this risk as much as possible, and then assess whether the potential benefits from the research outweigh the potential risk. Whether similar research outcomes could be achieved with a lower-risk research method should also be considered. Some research projects involve very overt physical risks with data collection, or widespread and divisive research outcomes, whereas other projects have less invasive data collection methods that present more insidious risks, and these projects require careful consideration of the risks presented to researchers, funding bodies, participants, and end users. There are several ethical considerations that must be taken into account when conducting research on the vulnerability of displaced people, particularly in the context of the Rohingya refugee crisis. Some of these considerations include:

1. Informed consent: Research participants must be fully informed about the nature of the research and give their informed consent to participate. This includes providing participants with information about their rights as research participants, the risks and benefits of participation, and the procedures that will be used during the research.

2. Protection of vulnerable populations: Displaced people are often in a vulnerable position, and it is important to ensure that their rights and well-being are protected during the research process. This includes providing support and assistance to participants and ensuring that the research does not cause harm or distress to participants. Although the participants are practitioners rather than refugees, the research still needs to be aware of this whilst staying in the region.

3. Data confidentiality and privacy: Research participants must be assured that their data will be kept confidential and that their privacy will be protected. This includes taking steps to ensure that data is stored securely, and that the participants' identities are protected.

4. Cultural sensitivity: Research on displaced people must take into account the cultural context of the population and be sensitive to cultural norms and beliefs. This includes ensuring that research is conducted in a way that is respectful and appropriate, and that the research design and data collection methods are appropriate for the population being studied.

5. Transparency and accountability: Researchers must be transparent and accountable for the research process and its outcomes. This includes ensuring that the research is conducted in an ethical and responsible manner, and that the findings are shared with the research participants and the wider community.

6. Reflexivity: Researchers must be aware of their own biases, assumptions, and positions and how they may be shaping the research process. This includes being self-reflective on the way the researcher's positionality, background and experiences may be impacting the research process.

As the study utilises interviews for data collection, human ethics approval from the University of Newcastle is required. The ethics application was submitted to and approved by the Human Research Ethics Committee of the University of Newcastle and included details of the potential participants, consent process and how the information will be analysed and stored. The research is designed to ensure voluntary and informed consent and only invites participants over the age of 18.

In order to maintain the autonomy and privacy of the potential participants, the interviews are entirely voluntary. Potential participants were given a copy of the participant information statement before they decided whether to be involved in the study. The statement provides clear details of the purpose and goals of the research including the intention to publish the

findings. Additionally, it clarifies that all participants have the right to withdraw from involvement at any time. The participants are informed that their personal data will be treated confidentially and anonymously. Only participants that gave their informed consent are included in the study and were asked to complete an interview.

All personal data is securely stored under password-protected cloud-based storage in line with the University of Newcastle's information management guidelines. Access to the data is exclusively limited to the student researcher and primary supervisor. All the data will be stored for a minimum of five years, after which all of the data will be permanently destroyed. The participants are informed of this procedure in the consent form. Copies of the ethics approval, consent form, and information statement are included as appendices.

3.9   Research Limitations

The situation surrounding the Rohingya population is constantly changing and at times access to specific regions can be restricted. Access to northern Rakhine State is restricted, hence it will be excluded from the research despite the fact that there are many Rohingya people still located in the border regions.

Given the constructivist approach to the research it is believed that human behaviour is shaped and situations can be created by the actors themselves. It should be acknowledged that the researchers should also be considered as actors and can indirectly impose their own definitions and values on the research process. Although efforts are made to approach the research from an objective position (see data source triangulation in Section 3.7), social research is inherently not entirely objective as it cannot be detached from its human subjects and actors (May, 1997).

3.10   Chapter Summary

This chapter provided a detailed overview of the methodology used in this study to examine the influence of humanitarian organisations on the disaster vulnerability of displaced people. A qualitative approach was chosen, using abductive reasoning to create propositions and further investigate the problem. The literature review was used to create a conceptual framework and guide the analysis and discussion of the study. The participants were selected from humanitarian organisations working in the Cox's Bazar region of Bangladesh, and data were collected through semi-structured interviews and field notes on participant observation. The data were analysed using a thematic analysis procedure, with the aid of Lumivero's NVivo software. The methodology was justified and the validity of the research was assured through the detailed explanation of the research strategy, research method, research approach, methods of data collection, sample selection, ethical considerations, and limitations of the project. This methodology provided the foundation for the examination of the humanitarian organisations' role in reducing disaster vulnerability of displaced people, which will be discussed in chapters five, six, and seven. The following chapter outlines the details of the chosen case study. It will provide the context for the analysis by explaining the hazards, exposure, and vulnerability of Rohingya people living in the area.

Chapter Four – Contextualising the Case Study

4.1 Introduction

This chapter presents the background for the case study on the Rohingya refugees who were forcibly displaced to the Cox's Bazar region of Bangladesh due to persecution and violence. The case study provides a detailed analysis of the effects of displacement on the Rohingya refugees, as well as the role of the humanitarian sector in reducing their vulnerability. The chapter also provides a hazard profile of the region and examines previous disasters in the area.

4.2 Background

The Rohingya people are an ethnic minority group who have been living in the Rakhine State of Myanmar for generations. The vulnerability of the Rohingya people can be traced back to colonial times, where they faced discrimination and marginalisation due to their distinct ethnic identity, language, culture, and religion. The Rakhine State, where the majority of the Rohingya population resided, is a unique area with distinct ethnicities, economy, environment, and religious practices that differ greatly from the rest of the nation (Ibrahim, 2016). These factors, along with the implications of communal violence and prosecution, have left the Rohingya population disproportionately vulnerable to natural hazards such as floods and cyclones that are frequent in the area (Green et al., 2015). However, this vulnerability dramatically increased after the 2012 communal conflict, which resulted in an estimated 300,000 people becoming internally displaced (APHR, 2015). This displacement left many people confined to IDP camps or informal makeshift housing, with limited access to basic infrastructure, job opportunities, food and water security, freedom of movement and access to resources such as health and medicine.

In 2017, the situation for the Rohingya people took a further turn for the worse when a series of relatively small-scale incidents sparked a widespread military crackdown, leading to over 650,000 Rohingya people fleeing to Bangladesh (Stratford, 2018). This displacement has resulted in a catastrophic humanitarian crisis, as the Rohingya people have been forced to flee across international borders, where they have been living in overcrowded and unsanitary conditions in refugee camps. The Cox's Bazar region in Bangladesh currently hosts more than 890,000 Rohingya refugees crowded into 34 camps (Dahgaypaw, 2021), and although natural hazards are common in the region, it is the vulnerability of human systems to these hazards that places the Rohingya at such a high risk of disasters. The displacement and overcrowding in the camps, coupled with inadequate infrastructure and limited access to basic services, has made the Rohingya population extremely vulnerable to the impacts of natural hazards such as floods and cyclones. Furthermore, ongoing discrimination and the lack of legal protection continue to exacerbate their vulnerability. The Rohingya people have been living in vulnerable circumstances in Rakhine State, Myanmar for generations. Their forced displacement and the current humanitarian crisis have further exacerbated their vulnerability to natural hazards and highlights the need for immediate and sustained humanitarian assistance, as well as long-term solutions to address the root causes of their marginalisation and vulnerability.

Figure 12: Rohingya refugee camps in Bangladesh. Source: Author Supplied

An earlier study conducted by the author, Johnson et al. (2018), examined the vulnerability of different groups in Rakhine State and identified that the Rohingya population, specifically those in IDP camps, were significantly more vulnerable in multiple key areas. The next stage in this research was to continue this investigation and identify the underlying causes of this variation in vulnerability. However, since the initial study, the situation in Rakhine has undergone significant changes. The mass displacement of the Rohingya people in 2017 has drastically altered their vulnerability. A significant number of those who fled are now residing in overcrowded refugee camps or in informal settlements around the Cox's Bazar region, with limited access to basic services and legal protection. Given the ongoing crisis, it is likely that this group will continue to live in extremely vulnerable circumstances with little hope of imminent change. This situation places a significant burden on humanitarian agencies to address the vulnerability of the displaced population. With a majority of the displaced population heavily dependent on humanitarian aid, it is essential to research the

effectiveness of efforts aimed at reducing vulnerability provided by the humanitarian sector.

This research aims to continue the investigation of vulnerability, focusing on the specific challenges faced by the Rohingya population who were displaced in 2017. The research examines the root causes of the variation in vulnerability and evaluates the effectiveness of vulnerability-reducing efforts provided by humanitarian agencies in the Cox's Bazar region.
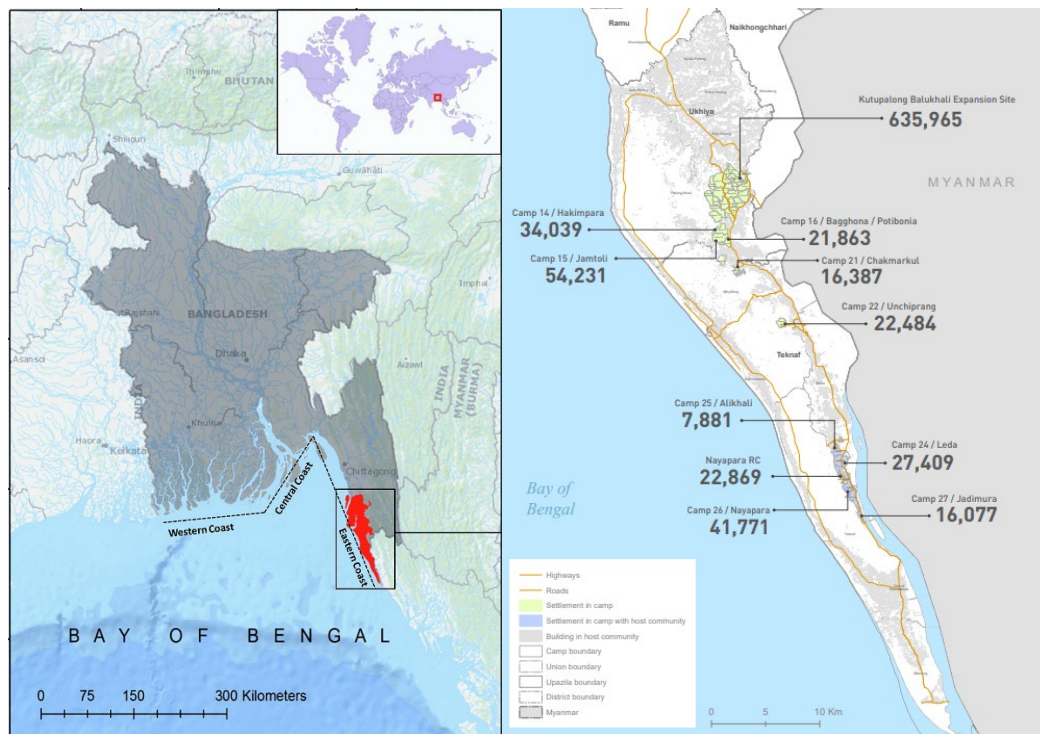
Figure 13: Maps of refugee camps (Alam et al., 2020; UNOCHA, 2022)

4.3 Study Site

The crisis is widespread across several camps in the southern areas of the Chittagong division; however, a majority of the humanitarian agencies are operating out of the city of Cox's Bazar. There are approximately 1.1 million Rohingya refugees in Bangladesh and the camps within this region contain 880,133 refugees, including 94,906 refugees already living in the region before the 2017 influx (UNHCR, 2020).

Table 6: Demographics and climate (Climate-Data, 2021; UNHCR, 2019)

Individual Refugees in camps	880,133
Families	205,066
Gender	48% Male, 52% Female
Children	55%
Elderly	3%
Specific Needs	31%
Climate	Tropical
Seasons	Wet Season April – October, Dry Season November - March
Temperature	Average maximum 31°C in April (warmest month) and 26°C in January (coldest month)
Precipitation	673mm in July (wettest month) and 4mm in January (driest month)
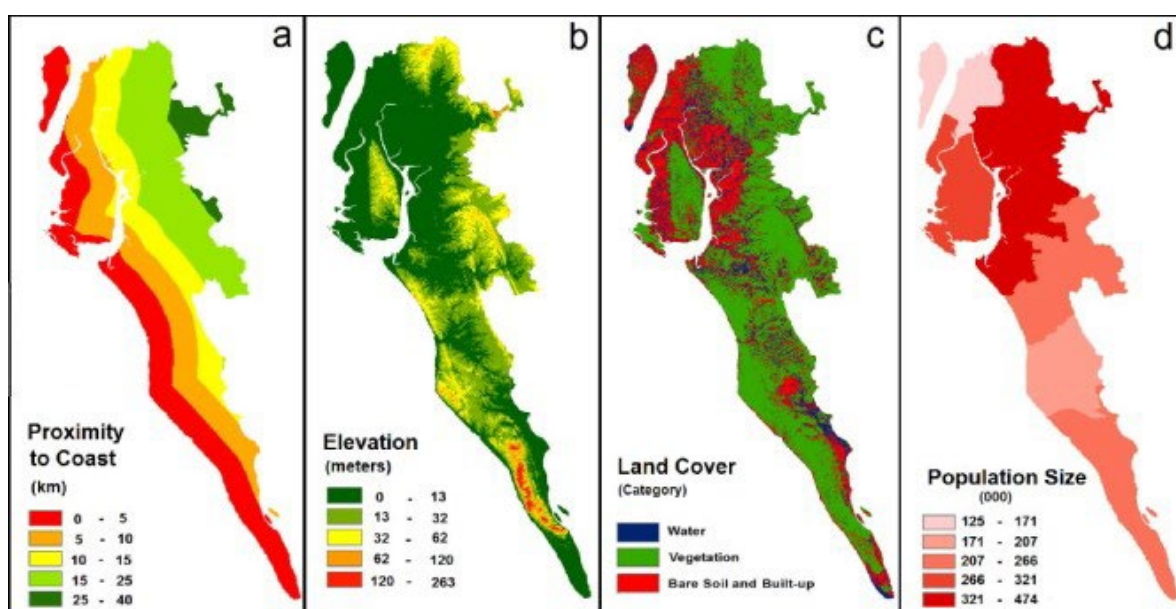
Figure 14: Exposure profile of the region. (a) Kilometres to exposed coastline (b) Topography of region in metres (c) land cover of region (d) population size of regions in number of thousands. Adapted from (Alam et al., 2020)

4.4 Disaster Profile of the Region

South Asia is argued to be one of the global regions most affected by climate change. According to the International Panel on Climate Change (IPCC) Sixth Assessment Report (2021), the leading impacts of climate change in the region include an increase in the

frequency of droughts and floods, which negatively affect local production; sea level rise exposing coasts to related risks, including coastal erosion and growing human-induced pressures on coastal areas; and glacier melt in the Himalayas leading to increased likelihood of flooding and avalanches. Additionally, crop yields in Central Asia and South Asia could decrease by up to 30% by the mid-twenty-first century. Out of all the countries in South Asia, Bangladesh is considered to be the most vulnerable due to its regional connectivity through geo-physical and hydrological features, as well as its reliance on trade for people's livelihoods (Zaman, 2019). Bangladesh's low-lying coastal areas and delta region make it particularly susceptible to sea level rise and flooding from river and coastal erosion. The country's economy is heavily dependent on agriculture, which is also highly susceptible to the impacts of climate change. This includes changes in temperature and precipitation patterns, increasing frequency of droughts, floods, and cyclones, and increased salinity in coastal areas, which can negatively affect crop yields. Furthermore, Bangladesh's population density and high poverty rates also make it more susceptible to the impacts of climate change, as a large proportion of the population lacks the resources and infrastructure to adapt to these changes. The country's large and growing population and the limited availability of arable land also increase the pressure on natural resources and exacerbate these impacts (Poncelet et al., 2010).

Bangladesh's flat topography and climatic features, combined with population density and socio-economic environment, make it one of the most disaster-prone countries in the world (World Bank, 2018). Over 80% of the national population is exposed to flood, earthquake, and drought risk, and over 70% are exposed to cyclone risk. It is predicted that with the effects of climate change, there will be an increased frequency of droughts, floods and exacerbated coastal erosion (Poncelet et al., 2010). Most of the refugee camps are located in the Teknaf

and Ukhiya regions in the southern tip of the country. As shown in <u>figure 15</u>, the southern tip of Bangladesh in particular is negatively affected by most parameters relating to disaster risk.
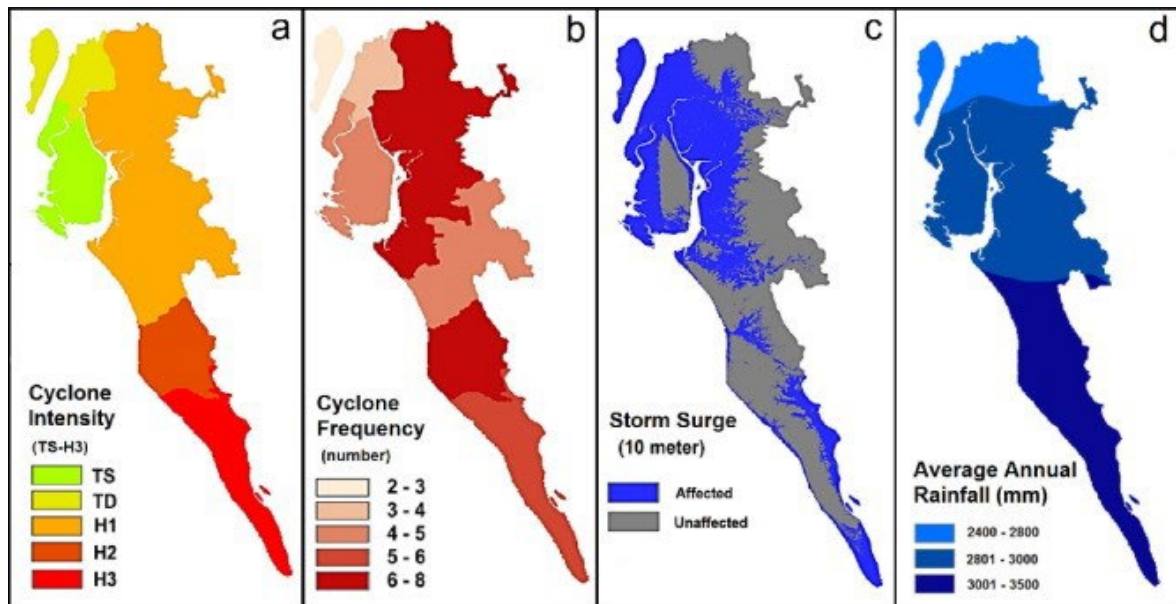
Figure 15: Hazard profile of the region. (a) Intensity of storms (tropical storm, tropical depression, H1, H2, H3) (b) frequency of cyclones (c) 10 metre storm surge reach (d) average annual rainfall in millimetres. Adapted from (Alam et al., 2020)

The refugee camps experience floods, cyclones, landslides, fires, and disease outbreaks. The following sections provide a brief overview of previous hazards and current risk of each of these hazards.

4.4.1 Landslides

Many of the refugee camps are located on the slopes of hills that have been stripped of vegetation to make way for shelter. Approximately 5,800 hectares of forest land cover was removed following the 2017 refugee influx (Ahmed et al., 2020). Additional land cover changes include hill cutting, slope modifications, and unplanned urbanisation. This has increased the risk of landslides in the region.

In July of 2021, three days of heavy monsoon rain and strong winds hit many refugee camps in the Cox's Bazar region, leading to flash floods and landslides. More than 12,000 refugees were affected and an estimated 2,500 shelters have been significantly damaged or destroyed (UNCHR, 2021). The situation was exacerbated by the impacts of the COVID-19 pandemic and at the time there was a strict national lockdown in response to the rising case numbers. At least six Rohingya people died, including three children, after part of a hill buried their bamboo and tarpaulin shelter in the Balukhali refugee camp (Aziz, 2021). The shelters in the camps continue to be at a high risk of landslide damage.

4.4.2 COVID-19 and Infectious Diseases

There have been numerous outbreaks of diarrhoea and diphtheria (World Health Organisation, 2019). Furthermore, unsafe water and poor hygiene conditions create a constant threat of cholera, hepatitis E and malaria (UNICEF, 2018). Notable was the diarrhoea outbreak on the island of Bhasan Char that infected at least 1,500 refugees (10% of the island's population) and killed four people in June of 2021. The outbreak was contained with the distribution of water purification tablets and oral rehydration solutions but there are reports that the health care on the island was inadequate (Miller, 2021). This alarmed the United Nations and human rights groups to the conditions in the island camp. Although the original relocation of 20,000 refugees to the island was voluntary, there are claims that many of the refugees were coerced to move there and were concerned with the safety of life on the island. Another 100,000 refugees are planned to be moved to the island (Miller, 2021).

As with the rest of the world, the Rohingya refugee camps were severely affected by the spread of COVID-19. As of May 2021, there were 863 cases of COVID-19 and 13 deaths in the

camps in the Cox's Bazar region (Islam, 2021). With difficulties in securing enough vaccines early in the pandemic, many of the camps introduced lockdown restrictions. Bangladesh started rolling out vaccines in the refugee camps in August 2021, prioritising people over 55.

4.4.3 Fire

Since the mass displacement event in 2017, there have been several fires affecting the refugee camps in the Cox's Bazar region. At least 15 people were killed and 10,000 left without shelter in a fire in March 2021 (Mahmud, 2021); this was just months after two fires that left 3,500 without shelter (UN News Service, 2021). Most recently, on the 5th of March 2023, a fire destroyed thousands of shelters leaving more than 10,000 people without shelter (AFP/Reuters, 2023). There are several contributing factors that put the refugees at risk from fires. Firstly, the building materials are not fire resistant as most of the shelters are constructed using bamboo, tarpaulin, and rope. Many of the shelters are built close together and along steep slopes; this allows the fires to spread quickly up the hill without fire breaks between the houses to slow the spread. Additionally, there are many households that cook using firewood for fuel, increasing the chances for accidental fires. Humanitarian agencies have since provided LPG bottles to protect the local environment, improve air quality and mitigate the risk of accidental fires (Mahecic, 2018). However, this does not eliminate the risk, as they can explode if used incorrectly. Due to the lack of available land, there is nothing that can be done about the shelter density and occupation of slopes to reduce risk.

4.4.4 Cyclones and Storm Surge

Bangladesh is one of the most disaster-prone countries in the world and experiences a high degree of seasonal variety including two cyclone seasons and a monsoon each year. The Cox's Bazar region is highly exposed to these hazards with a long coastline on the Bay of Bengal. The region experiences cyclones, landslides, storm surges, extreme temperatures and flash floods (American Red Cross et al., 2018). Although the region has not experienced a significant cyclone since the 2017 exodus, there remains a looming threat of a cyclone in the camps that are extremely vulnerable. The materials commonly used for shelters do not provide much wind resistance. Tie down kits and wall bracing kits have been distributed to improve wind ratings; however, they are still likely to experience high levels of damage in strong winds.

4.5   Vulnerability of the Rohingya

It is commonly argued that some of the most important factors of vulnerability for individuals and communities exposed to disaster risk are population density, public health conditions, socioeconomic status and gender discrimination (Burton, 2010; Li et al., 2010; Wolkin et al., 2015; Zhang & Haung, 2013). In a study by Kawasaki et al. (2017) it is shown that flood risk reduction measures have been implemented in Myanmar in the past decade; however, almost all the factors of vulnerability can be easily identified and are still underexplored. For example, gender discrimination is entrenched into societal structures. The patriarchal structure, referred to as Phon, teaches that men are born with power, glory, and holiness, whereas women are not. This has contributed to the emergence of a gender hierarchy which leaves women marginalised, oppressed and discriminated against in social, political and religious spheres (Gravers, 1993).

Each of these sources of vulnerability can be broken down to several different indicators. For example, socioeconomic indicators can include household income (Burton, 2010), unemployment rates (Roshti, 2010), access to transportation , tenancy status (Zhang & Haung, 2013), reliance on agriculture (Muyambo et al., 2017) and number of long-term residents (Cutter et al., 2010). Whilst the Rohingya were in Myanmar, the unemployment rate in Rakhine State was 10.4% and was the highest in the entire country (DPMIP, 2016). The conflict led to most of the Rohingya population being confined to certain villages and IDP camps. These communities are living in makeshift housing and have limited access to basic needs, restricted trade opportunities and have limited movement. These oppressive realities left Rohingya communities in an especially vulnerable and critically unstable situation. In a study by Johnson et al. (2018) looking into three different communities that are vulnerable to cyclones—an IDP camp, a village with a predominantly Rohingya population, and a village with a predominantly Burmese population—it was identified that there are clear differences between the three communities and the study provides evidence of the key drivers of vulnerability in Rakhine State. Furthermore, since the forced displacement of 2017, most of these indicators have been eroded completely, with a nearly complete reliance on humanitarian aid.

The current conditions of individuals and communities greatly characterises their vulnerability; however, Lewis and Kelman (2012) contend that vulnerability is not solely a result of top-down international policies, but is also shaped by a range of complex and enduring social, economic, and political processes that often go unnoticed. In fact, two primary groups of processes contribute to vulnerability: endangerment and impoverishment. The endangerment cluster encompasses phenomena like discrimination, displacement, and

environmental degradation, while impoverishment involves factors such as corruption, denial of resource access, and the misappropriation of public funds.

For the Rohingya, all of these long-term processes are prevalent whether they are in Rakhine or Bangladesh. For instance, in Rakhine, the Rohingya population has faced limited access to essential resources due to governmental actions, such as trade and movement restrictions. Numerous individuals have been forcibly displaced from their homes for an extended period exceeding five years, with no visible prospects for reintegrating into their former communities. Some still reside in border regions in temporary shelter and depend on relief initiatives for their basic survival. It is evident that there is a pressing need to shift the focus from providing immediate relief to implementing sustainable development projects in this region. Discrimination against the Rohingya people can be traced back to before Burmese independence in 1948 (Ibrahim, 2016). Following independence, the Rohingya community was initially recognised as one of the 135 official ethnic groups in Myanmar. However, in 1982, their official minority status was revoked, resulting in the loss of their citizenship rights. Instead, they were issued white cards as a means to establish their identity and affirm their rights within the state of Rakhine. In recent times, the Rohingya population has faced further marginalisation as their identity cards are being confiscated, leading to even more stringent limitations on their freedom of movement and ability to engage in trade. This makes it illegal for Rohingya people to travel to any other state of Myanmar (Green et al., 2015).

Since migrating to Bangladesh, it is likely the vulnerability of the Rohingya significantly increased. Many of the sources of vulnerability for the Rohingya in Rakhine still exist in Bangladesh. The ethnic group is even more reliant on humanitarian aid with widespread endangerment and impoverishment. Bangladesh as a whole ranks very poorly in vulnerability

indicators as demonstrated in the World Risk Report (Welle et al., 2013). The country received a vulnerability score of 64 (based on susceptibility, lack of coping capacities and lack of adaptive capacities), ranking it as one of the two most vulnerable countries (Pakistan received an equal vulnerability score) out of the 60 countries included in the study.

Figure 16: Deadly flooding in the Rohingya camps (Aziz, 2021)

The persecution of the Rohingya people is not confined to the borders of Myanmar and Bangladesh. There are approximately 92,000 Rohingya refugees in Thailand, 102,000 in Malaysia, and 21,000 in India. Additionally, the Rohingya still make up a large portion of Myanmar's 576,000 internally displaced persons (Dahgaypaw, 2021). Hundreds of the Rohingya refugees who fled to India were living in camps in the capital, New Delhi. After enduring several fires within the camps, their makeshift mosque, their only place of worship, was demolished by police and civil authorities (Aafaq, 2021).

4.6   Current Situation in Cox's Bazar

The Rohingya refugee crisis has been ongoing for decades in Myanmar's Rakhine State, where the Rohingya people have faced systematic disenfranchisement, discrimination, and targeted persecution. This ongoing discrimination and persecution have repeatedly driven Rohingya refugees across the border into Bangladesh and further abroad, with widespread influxes occurring following surges in violence in Rakhine State in 1978, 1992, 2012, and again in 2016. The largest and most recent influx of refugees from Myanmar into Bangladesh began in August 2017. As of January 1, 2022, approximately 918,841 Rohingya refugees are registered in Bangladesh and are residing in densely populated camps (UNOCHA, 2022). Bangladesh has charitably provided safety to Rohingya refugees from Myanmar for decades, in particular following the events of August 2017. However, Bangladesh has also borne a large cost with an enormous responsibility, including financially, for this crisis. Bangladesh authorities have recently increased their restrictions on the livelihoods, movement, and education of Rohingya refugees according to a report by Human Rights Watch (2022). Officials have destroyed thousands of shops that were vital sources of income for the refugees and imposed new restrictions on travel within the camps in Cox's Bazar, denying the Rohingya the ability to live freely and independently. Beginning in October 2021, it was reported that officials began bulldozing shops in several camps, often without notice. More than 3,000 shops have been closed or destroyed, affecting tens of thousands of refugees. New restrictions have also been placed on education programmes, limiting the ability of Rohingya children to learn and build self-reliant futures. Bangladesh authorities also banned Rohingya-led community schools, affecting as many as 60,000 students. Since 2021, Bangladesh authorities banned some schools that Rohingya teachers had established to in response to the lack of formal and secondary-level education in the refugee camps. Additionally, many Madrasas were closed

that provide Islamic religious education. Bangladesh prohibits humanitarian actors from facilitating education for Rohingya refugee children beyond basic, primary-level classes. In a report by Human Rights Watch (2019), it is documented how Bangladesh prohibits aid groups in the refugee camps in the Cox's Bazar district from providing Rohingya children with accredited or formal education. There is no formal secondary education, and NGOs are barred from teaching the Bengali language and utilising the Bangladesh curriculum. Furthermore, Rohingya children do not have the opportunity to continue their education in schools outside the refugee camps.

The international community is continuing to provide humanitarian assistance and work towards the voluntary, dignified, safe, and sustainable repatriation of Rohingya refugees to Myanmar. Since August 2017, under the guidance of the Government of Bangladesh, humanitarian efforts have successfully saved and improved the lives of many individuals. The current policy framework acknowledges that the presence of Rohingya refugees in Bangladesh is temporary and emphasises the importance of voluntary and sustainable returns once the conditions in Myanmar become conducive. Despite entering its sixth year, the Rohingya refugees consistently express their desire to return to their home country. The humanitarian community, in collaboration with the Government of Bangladesh, will continue to provide essential humanitarian aid and services. Additionally, efforts will be made to facilitate repatriation by enhancing skills, capacity-building activities, and expanding livelihood options in Myanmar. Educational initiatives aligned with the Myanmar curriculum will also play a crucial role in preparing Rohingya refugees for their eventual reintegration into society in Myanmar.

4.6.1 Needs Assessment Overview

The 2021, the ISCG Joint Multi-Sector Needs Assessment (J-MSNA) and sector-specific assessments provided a comprehensive overview of the diverse needs of the Rohingya population in Cox's Bazar and the host communities in Ukhiya and Teknaf Upazilas (ISCG, 2021). The report focuses on the impact of the COVID-19 pandemic on these communities and was used to inform the 2022 Joint Response Plan. The results of the J-MSNA indicate that the most common needs reported by Rohingya refugees include shelter materials, access to food, protection, energy, access to skills and capacity building activities, cooking items, and education. Women and girls have specifically expressed concerns regarding their limited access to safe and functional latrines as well as electricity. The protection needs of vulnerable groups such as women, children, and individuals with disabilities often go unreported and unnoticed. Acts of violence against women and children, including sexual and gender-based violence, are often accompanied by stigma, leaving survivors without a voice, and preventing them from seeking justice or support for the violations they have endured. In terms of education, there are significant gaps, particularly among adolescents, with the majority of individuals aged 15 and older not being enrolled in learning centres. This disparity is even more pronounced for female learners. The host communities also face pressing needs, including access to shelter materials, income-generating activities, employment opportunities, and healthcare, as they continue to grapple with the lasting effects of the COVID-19 pandemic. Other priority needs among the Bangladesh host community include additional cooking fuel, access to safe and functional latrines, and access to clean drinking water. At the end of 2021, UNHCR initiated multi-sectoral assessments to better understand the needs of Rohingya refugees that were moved to Bhasan Char and to facilitate planning of supplementary relief efforts. These assessments acknowledged unmet needs in the provision

of registration, gender-based violence, health and nutrition, food security, child safety, WASH, shelter, non-food items, informal education, skills and capacity building, environmental management, and disaster preparedness. As the population increased over 2022, these needs, as well pressure on the ecosystem, will likely increase. Attention is also needed for persons with special needs such as ensuring accessibility for people living with disabilities (UNOCHA, 2022).

Figure 17: Refugee camp in Bhasan Char (UNOCHA, 2022)

4.6.2 Humanitarian Coordination

The Rohingya humanitarian response is a multifaceted and complex challenge that requires a coordinated effort from a variety of actors. In Bangladesh, the government plays a leading role in this effort, with several key bodies and individuals taking on specific responsibilities. The National Strategy on Myanmar Refugees and Undocumented Myanmar Nationals, which was issued in 2013, established the National Task Force (NTF) to provide oversight and strategic guidance for the overall response (UNHCR, 2017). The NTF, which is chaired by the Ministry of Foreign Affairs (MoFA), is responsible for ensuring that the response is well-coordinated and effective. Additionally, the National Committee on Coordination, Management and Law and Order was formed in December 2020 to further enhance the Government's efforts.
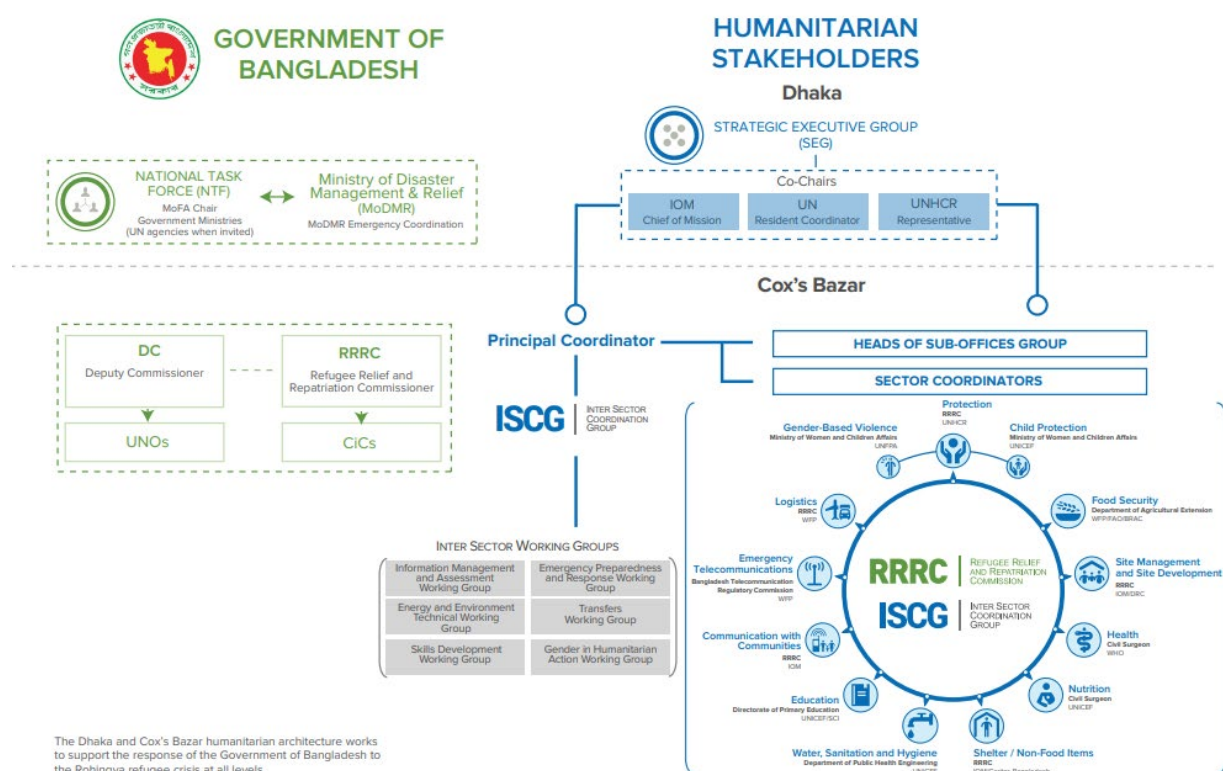
Figure 18: Coordination of the Rohingya humanitarian response (UNOCHA, 2022)

In Cox's Bazar, the Refugee Relief and Repatriation Commissioner (RRRC) is responsible for management and oversight of the Rohingya refugee response. The RRRC, who is under the Ministry of Disaster Management and Relief (MoDMR), is responsible for ensuring that the needs of the refugees are met in a timely and effective manner. The Deputy Commissioner, who is leading the civil administration in Cox's Bazar District, also plays a crucial role in coordinating the response to the needs of Bangladeshi host communities, including during and after disasters. Humanitarian actors also play a key role in the response with many forming part of the Strategic Executive Group (SEG) providing overall guidance for the response and engaging with the Government of Bangladesh at the national level.

At the field level in Cox's Bazar, the coordinator of the Inter-Sector Coordination Group (ISCG) ensures the overall coordination of the response, including liaison with the RRRC, deputy commissioner, and local government authorities. The ISCG coordinator chairs the Heads of SubOffices Group, which brings together the Heads of operational UN Agencies and members of international and Bangladeshi non-governmental organisations (NGO), community members active in the response, as well as donor community representatives based in Cox's Bazar (UNOCHA, 2022).

4.7   Chapter Summary

In conclusion, this case study chapter highlights the complexities and challenges faced by displaced Rohingya people in the Cox's Bazar region of Bangladesh, through a detailed analysis of the effects of displacement and the challenges faced by the community. The chapter also highlights the vulnerability of the Rohingya refugees and the hazard profile of the region, emphasising the urgent need for more effective disaster risk reduction and management strategies to protect the displaced population. Overall, this case study overview provides valuable insight into the ongoing displacement crisis in Cox's Bazar and highlights the need for continued efforts to address the needs of displaced individuals in the region. The subsequent chapter will expand on this through the analysis of interviews that were undertaken with humanitarian practitioners in the Cox's Bazar region.

Chapter Five – Data Analysis

5.1   Introduction

Chapters three and four described the details of the research methodology including the data collection and analysis process along with the details of the chosen case study. This chapter presents the next stage and includes the steps in the analysis process including coding from literature, coding from interview data, and categorisation into sub-themes and themes. Each of the codes is described and their connection to sub-themes and themes explained. Each code is supported by at least one quotation from the transcripts for context and verification. The section also includes a visual representation of the analysis in the form of a thematic network map. The overarching themes and proposed changes will then form the basis of the discussion chapter. The findings will be used to inform proposed changes to the conceptual framework.

5.2   Description of the Analysis Process

The analysis process adopted for this study can be broken into seven steps: familiarisation, initial coding, axial coding, generating themes, reviewing themes, defining and naming themes, and writing up. However, not all of these steps are fully documented in the thesis. For example, familiarisation with the data is a crucial first step for the researcher in developing a deeper insight, however, this process is not recorded in detail. The analysis steps are undertaken in an iterative process rather than sequentially. This allows the researcher to repeatedly return to the data during the data collection, transcription, and preliminary analysis. The codes are initially planned during the familiarisation and transcription process (stage 1 of coding) and then further refined and labelled using Nvivo (stage 2 of coding). The

full transcripts and recordings were reviewed in full a final time and axial coding was undertaken (stage 3 of coding). The coding process has been summarised in <u>table 7</u> below.

This study uses codes as per this definition: a section of the text such as *"a phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data"* (Saldaña, 2015, pp. 3-4). The codes were formed from key phrases or paragraphs in the transcripts according to four criteria. The sections of text were coded if they were repeated frequently, specifically deemed as important, aligned with the conceptual framework, or conflicting with the literature. The openness of semi-structured interviews allows for some interview questions to be derived from the literature, which can also result in literature-derived codes whilst allowing the researcher and participant to discuss tangential ideas. This can result in codes that have been derived exclusively from the data. The codes (also referred to as child nodes) were grouped into category nodes (sometimes referred to as sub-themes or parent nodes), based on the underlying meanings or concepts that they refer to. In some cases, a single phrase can trigger multiple codes and is hence related to more than one category or theme. These categories are then grouped together into broader ideas or concepts, which sees the emergence of the five overarching themes. These themes explain how each of these parent nodes relates to a broader phenomenon or phenomena. The themes are used to look at the relationships of the codes and groups them based on their collective ability to describe the story behind the data (Saldaña, 2015). Although the table below only presents the codes as a simple three level hierarchy, the reality of the relationships is more complex. Some of the child nodes interact with more than one parent node, and some parent nodes interact with one or more theme. These relationships are best illustrated in the thematic network map in <u>section 5.8</u>. The themes are explored further in the subsequent chapter. In order to provide clarity and

structure to the coding process, a codebook has been created and is included in appendix 1. This codebook includes the label for each code, a definition, "when to use" criteria, "when not to use" criteria, and an example quotation. Each of the quotations is deidentified; however, a labelling system is used to indicate whether the respondent was an employee of an international organisation (INGO##), a local organisation (NGO##), or a United Nations agency (UN##).

Table 7: Summary table of coding process

Overarching Theme (Theme Nodes) (Labeled T#)	Categories (Parent Nodes) (Labeled T#P#)	Codes (Child Nodes) (Labeled T#P#C#)
Theme 1 – Disconnect between knowledge and humanitarian operations (T1)	Disconnect between policy and operational level (T1P1)	Frustration with restrictions inhibiting best practice (T1P1C1)
		Mention of lack of understanding of contextual issues at higher levels (T1P1C2)
		Critique of uninformed policy (T1P1C3)
	Local advocacy (T1P2)	Access to a political voice (T1P2C1)
		Advocacy in longer-term solutions (T1P2C2)
		Calls for increased rights (T1P2C3)
	Understanding of disaster theory (T1P3)	Pragmatism over theoretical best practice (T1P3C1)
		Not being up to date on literature (T1P3C2)
		Policy not matching theory (T1P3C3)
Theme 2 – Livelihoods and access to resources as risk reduction (T2)	Social considerations in project design (T2P1)	Going beyond shelter (T2P1C1)
		Mention of social capital (T2P1C2)
		Potential for self-recovery (T2P1C3)
		Cultural aspects affecting vulnerability (T2P1C4)
	Education programmes for long-term impacts (T2P2)	Language education (T2P2C1)
		Matching skills to context (T2P2C2)
		DRR education (T2P2C3)
	Camp planning and human right to shelter (T2P3)	Egress issues (T2P3C1)
		Resistance to hazards (T2P3C2)
		Population density/available land (T2P3C3)
		Adequate shelter (T2P3C4)
Theme 3 – External influences opposing NGO intentions or vulnerability theory (T3)	Government influence on projects (T3P1)	Mention of government elections (T3P1C1)
		Bhasan Char plans (T3P1C2)
		Funding restrictions (FD7) (T3P1C3)
	Donor influence on projects (T3P2)	Donor-driven indicators (T3P2C1)
		Cash-based initiatives (T3P2C2)
		Short-term focus (T3P2C3)
		Temporal perspective of cash flow (T3P2C4)
		Myanmar open to repatriation (T3P3C1)

	International political agendas (T3P3)	Compromising principles and standards (T3P3C2)
		Lack of press freedom (T3P3C3)
Theme 4 – Organisational and coordination concerns (T4)	Cluster approach (T4P1)	Mainstreaming of DRR (T4P1C1)
		Issues with Coordinating body (T4P1C2)
		Critique of UN approach (T4P1C3)
	Monitoring, evaluation, and learning (T4P2)	Lack of feedback from beneficiaries (T4P2C1)
		Reliability of data (T4P2C2)
		Focus on output-level indicators (T4P2C3)
	Lesson sharing (T4P3)	Sharing between organisations (T4P3C1)
		Sharing between regions/deployments (T4P3C2)
		Sharing with private sector (T4P3C3)
	Staff turnover (T4P4)	Building working relationships (T4P4C1)
		Limitations on salary and opportunities (T4P4C2)
		Turnover as a barrier to improvement (T4P4C3)
Theme 5 – Social cohesion and equity issues (T5)	Localisation of NGO labour force (T5P1)	Impact of INGO/expats on region (T5P1C1)
		Lack of capacity (T5P1C2)
		No localisation of decision-making roles (T5P1C3)
	Strain on local resources (T5P2)	Construction materials (T5P2C1)
		Deforestation (T5P2C2)
		Infrastructure strain (T5P2C3)
	Integration and equity of humanitarian aid (T5P3)	Potential conflict with host community (T5P3C1)
		Mention of socio-economic status of hosts (T5P3C2)
		Disparity in assistance (T5P3C3)
		Resistance to integration (T5P3C4)

5.3   Disconnect Between Knowledge and Humanitarian Operations (T1)

The first theme to emerge resulted from the grouping of the category nodes; disconnect between policy and operational level (T1P1), local advocacy (T1P2), and understanding of disaster theory (T1P3). Together this grouping of nodes and the relationship between these nodes can be represented as a group by the theme labelled "disconnect between knowledge and humanitarian operations". Throughout many of the participants' responses, there were several statements that demonstrated a rift between what is known to be best practice and what is actually implemented. They cited many possible reasons for this, with compromises of misuse of power, poor governance, lack of political interest, competing interests,

uninformed policy, a lack of a voice for the refugees, or a broader lack of understanding of the literature.

5.3.1 Disconnect between policy and operational level *(T1P1)*

5.3.1.1 Frustration with restrictions inhibiting best practice (T1P1C1)

Restrictions on what is allowed to be implemented was identified as a critical factor in reducing disaster risk. Many respondents stated that they believed that they would be able to better reduce risk if not for restrictions stopping them from implementing what they believe to be best practice. This code included various sources of imposed restriction but most often it was directed at the various levels of government in Bangladesh.

"The government of Bangladesh doesn't want refugees, a million refugees here for 10 years. So they have some programming restrictions. So we can't really do livelihoods. We can't really do education. So our ability to enable refugees to be self-sustaining is limited, which is our goal as [organisation name] as it should be to make ourselves null and void. And for the people, the communities that we're serving to be able to, kind of, you know, live without our services and assistance. So that's obviously quite difficult to do. We're being prohibited from doing a lot of that." **– INGO04**

5.3.1.2 Lack of understanding of contextual issues at higher levels (T1P1C2)

With multiple vertical layers in organisational structure and within the UN system, there is sometimes a lack of understanding of on the ground issues. Headquarters are usually located far from the refugee camps and some nuances in the context are not communicated effectively to all levels. With the barriers of time and bureaucracy, it was often cited that

residents, refugees, and humanitarians would find unofficial or informal solutions when necessary.

"It started just like people adding to what is there, adding a layer of concrete on top of the sandbags. And the last thing I saw were, like, proper stairs made of concrete. So I think a lot of the things would have been little by little tolerated and allowed, but since there's no, like, announcement or official guidelines, people will just try and build what they need. So a lot of things are happening informally because otherwise it takes too long or just gets rejected because those higher up don't understand the local need. But also because people find their way to make things more permanent, and there's nothing anyone can do."- NGO03

5.3.1.3 Critique of uninformed policy (T1P1C3)

Critique of uninformed policy was regularly mentioned as a barrier to reducing disaster risk. There is a common feeling that policy is not directly aligned with the research but rather informed by political interest. In particular, there was critique relating to the curriculum in education programmes.

"There is policy blocking most long-term projects. Like even changing curriculum. Something that is definitely a long-term threat to the stability of the population. So how to improve the sustainability of a camp where you're not allowed to help people help themselves? I mean, we are still feeding like 900,000 people a month. And I'm sure they would always do that to some degree, if you look at that alone as like a self-reliance sort of thing, like where food is still the number one need, then that's like, okay, you're still really hyper vulnerable when you're mentioning that." – INGO07

5.3.2 Local advocacy *(T1P2)*

5.3.2.1 Access to political voice (T1P2C1)

The respondents often reported that the Rohingya refugees were disenfranchised and lacked a political voice locally. This was understood to be a key barrier to reducing their vulnerability.

"They [the refugees] are unable to advocate for what they need. They cannot influence when looking at larger issues of legal status of issues around repatriation, relocation, issues around, I mean I think our big points for the year are making sure that the refugees are consulted and decisions that are being made about them in the camps. We worked with emerging civil society organisations in the camps as well to try to support them in a nondirective sort of way, to help them sort of take up and express their rights in the way that they want. So one of the big things we do is try and make sure that their voice is heard. It is really one of our biggest challenges." – INGO14

Some respondents mentioned that the refugees were consulted and able to state what they want, but it did not influence the outcome.

"I think we do [a] pretty good job about consulting people, about things like where should we put these new latrines or something like that. Not that sort of thing, but more of the bigger 'what's going to happen to you forever?' kinds of questions, and 'what would you like to happen?' They can say what they want, but that's not what they will get." – INGO06

5.3.2.2 Advocating to government (T1P2C2)

It is understood within the literature that a lack of access to a political voice is a root cause in the progression of vulnerability. Many respondents identified that the Rohingya refugees (like

many others) lack any representation within the government. Humanitarian organisations act as a proxy to fill this need and advocate on behalf of the beneficiaries.

"Even in New York and Brussels, working sometimes we will equally share with other NGOs, brief member states on why are we seeing whatever it is we have and what do we recommend to them to recommend to the government. It's a bit like a puzzle and sometimes it's not that straightforward and sometimes you don't see results right away, but it's the way how we do advocacy." – INGO02

5.3.2.3 Calls for increased rights (T1P2C3)

On a global scale, advocacy still was seen as a key issue. There is a recognition that issues facing the Rohingya refugees' vulnerability are at times beyond the influence of the Bangladesh Government. There is a need for support from powerful nations and countries within the region.

"Get past these barriers and responses just through advocacy through the government because it seems like a lot of the problems stem from the government. Advocacy here is quite good, we've been in Bangladesh since 1950 and so we have very good relations with the government, through Dhaka. We obviously also have a global platform. We also are a child rights-based organisation, so we have a lot less risk on us with advocacy because we speak from a child rights perspective. And so that's very difficult for governments to argue with. However, a lot of our, influence lies in the West, and this is a regional problem. So if China's not on board, then, I mean, it's not easy to get all the Latin American countries to say yes. You know, need support. So we need the ASEAN (Association of Southeast Asian Nations) countries to be fully engaged and pressuring China. I mean, we also need the European countries for putting sanctions back on Myanmar because that's really what's going to influence, that's

what the military cares about is financial gain. A lot of the problems are on a high level. It's not operational and so absolutely I would say the vast majority of the problems are at a high level." – INGO01

5.3.3 Understanding and implementing theory *(T1P3)*

5.3.3.1 Pragmatism over theoretical best-practice (T1P3C1)

Several respondents mentioned that a pragmatic approach was taken as it was often the only realistic solution in the short-term. Although there was a general understanding of the need for long-term durable solutions, at times it was deemed necessary to be realistic in the given context.

"Put in steps in the hillsides and putting some concrete, put anything like shrubbery, you know, just and try to mitigate the effects, but nowhere near on the scale that's needed. It's a difficult balance, you know, hundreds of thousands of people arrive and set up stuff and they just need somewhere. And if you take the time to, to plan that properly and put that in place with all the relevant DRR aspects in place, it would take months. So what are people supposed to do, what are 100,000 people supposed to do for three months while we're working on that? So the people that are in an area that's prone to landslide just have to wait. It's up to the government if there is a chance to relocate." – NGO03

5.3.3.2 Not being up to date on literature (T1P3C2)

When prompted, many humanitarians claimed to not be up to date with the research within their field. They cited various reasons for this including a lack of time for continuous

professional development (CPD), a lack of requirement from their organisation, or they felt it did not influence what they were able to achieve on the ground.

"I am honestly not across the studies, I think years ago I would have, I would have thought about this in this very academic way and in a theoretical way. I think you need to distance yourself from it because if you are in the field, then it's more operational. Obviously everyone that's working here has a role in it. They are doing good. Like really it's true humanitarian, but yeah, I think, when you kind of scale out and look at the different donations that come through and especially government donations, then it becomes a bit more tainted. Like, I really think that donors aren't in a position to say how the money should be spent because the organisations, the professionals are they doing what they can to improve. And then all of a sudden you get this donation, it says, no, it needs to be spent this way. And you need to measure these indicators. I think that's really dangerous because you're just going to take whatever money you can get." **– INGO08**

5.3.3.3 Policy not matching theory (T1P3C3)

The policy not matching what is known to reduce vulnerability was identified as a critical factor. Some participants mentioned that their organisation knew of a preferable option, however, they were following policy that did not align.

"As an industry, generally we are trying to move towards more cash programming because we understand that different households and individuals need different things. It gives them the flexibility in the agency to buy what they need. Which is preferable to giving them stuff as standard that we think they need. We do a lot of research into this for years and years. We contextualise and we ask questions, and we try and make sure that the standard hygiene kit, whatever meets their needs, but that assumes that everyone has the same need. And that's

not the case. That's why very quickly these marketplaces spring up selling aid because we're not quite getting it right. Yet the government won't let us do cash-based programmes."-INGO06

5.4 Livelihoods, Access to Resources, and Built Environment for Disaster Risk Reduction (T2)

The next theme to emerge resulted from the grouping of the category nodes social considerations in project design (T2P1), education programmes for long-term impacts (T2P2), and camp planning (T2P3). Together this grouping of nodes and the relationship between these nodes can be represented as a group by the theme labelled "Livelihoods and access to resources used for disaster risk reduction". Throughout many of the participants' responses, there were several statements that demonstrated that there was a focus on supporting livelihoods and improving access to resources in order to reduce disaster risk. This is in line with the research which shows that a focus on livelihoods enables the blending of DRR and development as it allows additional productivity and the stability of diverse livelihoods to be invested into DRR (Wisner et al., 2011).

5.4.1 T2P1 Social considerations in project design (T2P1)

5.4.1.1 Lack of DRR beyond shelter cluster (T2P1C1)

Disaster risk reduction is widely recognised in the literature to include a wide variety of factors, including aspects within social structures, inequality, access to power, etc. However, when prompted to comment directly on disaster risk reduction, most respondents claimed

that it is the responsibility of the shelter cluster and that they lack the knowledge to comment on the matter.

"I don't really know about that [reducing disaster risk], you could talk to the shelter specialists or the CICs. They are working in this area" **- NGO01**

5.4.1.2 Mention of social capital (T2P1C2)

Many of the respondents commented on the importance of social capital in reducing disaster risk. However, most often they mentioned that they do not actively aim to build social capital. They describe it as something that is the responsibility of the refugees.

*"Most of the social capital just kind of happens organically. We don't do much to force it. But in terms of the vertical connections, that is where we need advocacy. They don't have any social capital with power positions or with other groups." **– NGO04***

5.4.1.3 Potential for self-recovery (T2P1C3)

Self-recovery is not seen as a viable option for the refugees in any widespread disaster. This is despite an understanding of the numerous benefits that can come from self-driven or partly self-driven recovery. There is a lack of cash and access to construction materials and other resources in the marketplaces.

"So we're not allowed to give out cash in the camps because the government doesn't allow that. So they would be largely reliant on the humanitarian sector to distribute food, to rebuild the shelters, to handle materials for temporary shelter, that kind of thing. So they don't have access to a suitable marketplace. I don't know what their access is to cash, and I don't know what materials, I mean from what I've seen in the markets, it's mostly small household items.

But I don't think there are tarpaulins and this, I'm sure they're available somewhere, but they're probably quite expensive." **– NGO04**

5.4.1.4 Cultural aspects affecting vulnerability (T2P1C4)

Participants also shared their views regarding some cultural aspects that they believe affect the vulnerability of the beneficiaries. They expressed it as a sensitive and difficult issue as the they do not want to arbitrarily enforce their own cultural values, however, in some situations felt that it was necessary to improve outcomes.

"And in relation to vulnerability as well. What I mean by that is the Rohingya themselves, contribute to vulnerability, particularly women and adolescent girls, because women have a lot of, there's a lot of restrictions when it comes to movement of women within the communities. Women, those that are married, need to secure permission from their husband before they can participate in any activities, even, like just bringing the sick child to the hospital That puts the risks, a lot of risks on the part of the child and also the woman. And in terms of the adolescent girls, only a small percentage of them in the past has access to education. And when we say education, it's not even formal, we're just talking about very basic literacy and numeracy skills. It's just two hours in a week or twice in a week. Women are also subjected to a lot of threats, especially those who are volunteering for different organisations." **- INGO10**

5.4.1.5 Lack of trust (T2P1C5)

A lack of trust from the refugees towards the organisations was mentioned by several participants. They highlight that the beneficiaries have been deceived many times before and that the organisations need to work carefully in order to build a trusting relationship. Trust is seen as a crucial factor in improving outcomes.

"Many don't want to register for aid. Which is obviously a massive problem because they think that their data will be given to the government of Myanmar. I don't know why, maybe because we used to force them back. So there was a lot of fear around that and I think that will ebb and flow like everything. And there's been a lot of pressure on them to register from CICs. It's led to a lot of confusion. And then coupled with it happening around the time of the repatriation, people were thinking, how did they get on this list, you know? And so they think, 'oh, I've given my name, it must be how I'm on the list', which wasn't true. And that is not true obviously, but you could see how people would make that connection. So that's one of our kind of big concerns is how do we make sure that people are still going to be able to access aid and maintain their trust; their trust in us is low, very low after, especially after that experience" **— NGO03**

5.4.2 Education programmes for long-term impacts *(T2P2)*

5.4.2.1 Language education (T2P2C1)

Participants reflected on the languages taught through their education programmes and how they are not best suited to long-term outcomes. Most participants believed that most of the refugees were going to stay in Bangladesh for the foreseeable future and that should be aligned with education programmes.

"Education-wise, we're very limited in what we're allowed to do, so we're not allowed to use Bangla in the camps at all. So we have to use English or Burmese. So that obviously suits them to go back to Myanmar, but that's not what we would prefer" **— NGO04**

" And the discussion, like education, again, the government of Bangladesh, they don't want the refugees to use the Bangladeshi curriculum. In Rakhine they don't have the curriculum education, so that's a challenge. But they have the madrasas in Arabic, but madrasas is in formal school for them. Okay. So, starting from literacy, you need to figure out what kind of literacy needs to be discussed then what they require here. We use English for a while again. Like it will be benefit for here and for when they return as well. But for skill development, we are thinking both." – INGO15

5.4.2.2 Matching skills to context (T2P2C2)

It was identified that developing skills was difficult compared to other crises. It was not clear which skills they should be developing as they vary depending on whether the refugees are repatriated, relocated to Bhasan Char, or remain where they are. They also had to ensure that they were not giving false expectations to the refugees and they meet the relevant restrictions.

"One of the things you're taking into consideration is raising expectations amongst community. If we start training them in different skills and then they can't access those skills, it's a wasted time and resources, but it also is emotionally difficult for them, those people to, to deal with" – UN07

5.4.2.3 DRR education (T2P2C3)

Disaster risk reduction education proved to be limited within the camps. Most of the education regarding reducing risk was limited to understanding warning systems. There was an understanding that more needed to be done in this space.

"It's really difficult at the moment. Now we basically are just doing the very basics around early warning and what to do. But even with the flag system, it is not that clear and people don't know who is in charge, what to do, they just panic if there is a warning." **– NGO05**

5.4.3 Camp planning (T2P3)

5.4.3.1 Egress issues (T2P3C1)

Given the hilly and recently deforested landscape, it was unsurprising that egress is a major concern within the camps. Several respondents mentioned the troubles faced with the difficult terrain. Predominantly they mentioned the problems it creates for people with disabilities and elderly people.

"First of all, the main challenge is the physical environment of the camps, which everybody has struggled with from the beginning, the overcrowding, the terrain, the accessibility of the sites from here. And then there's the sheer size and scale. And it seems to get worse over time. The deforestation makes the environment worse and the population is still growing" **– INGO09**

5.4.3.2 Resistance to hazards (T2P3C2)

The shelters generally have little resistance to the common hazards in the region (landslides, fire, cyclones, and storms). Bamboo shelters are especially vulnerable to wind. They were originally expected to withstand 40 km/hr winds, however, with the WBK (wall bracing kits) and TDK (tie down kits) distributions, it is expected to increase this to at least 60 km/hr winds. The bamboo was originally only allowed to be untreated and would deteriorate quickly.

"Even in the initial phase of the response, our priority would be to build, as much as possible, semi-permanent structures. At least we were allowed to do that last year. So we had to build

these kind of temporary bamboo structures. We weren't even allowed to have treated bamboo because it was seen as too permanent. So we've now got in some of the camps, some of the CIC we've said, 'okay, you can use treated bamboo and build semi-permanent structures', but that also means we need to, like, shut down our service, rebuild everything and then start up again."- NGO01

5.4.3.3 Population density/available land (T2P3C3)

Population density is often mentioned as a key barrier in reducing vulnerability. It impacts many decisions relating to access, minimum floor areas, and space between shelters for drainage or fire breaks.

"Obviously, overcrowding has been a massive issue. It is only getting worse as more people come in, there's not really much space to use. I have been getting the feedback and complaints that quite often people will say, your child friendly space or your education space where everyone's up on a hill and 'my kids can't go up there', or you know, 'your health services are up on a hill' or, that they're not where we're located, or like, 'I'm pregnant. I can't travel easily'." - INGO08

5.4.3.4 Adequate shelter (T2P3C4)

The SPHERE guide provides minimum standards for the physical structure such as a floor area of 4.5 m² per person. Many of the requirements in the guidelines are not possible in the camps. Many respondents claimed that this was not realistic and instead of focusing on achieving 'adequate' shelter, they instead aimed for shelter that is as durable as is possible.

"We have already discussed this with the shelter sector that providing like the 4.5 square metre per person is impossible in the field. And they agreed that this is not possible for us to do. Now, the thing we are aiming to provide them is durable shelter, so that in the cyclone,

and in the rainy season, they are not affected. Like no strong water can get into the site. And now the shelter sector is trying to implement the kitchen inside the house so that they do not need to go outside in the rain. So these things are mainly focused now in the midterm shelter and the transitional shelter as well, so that we can try to accommodate if it's possible. It is not meeting all standards and it is not technically adequate, but it is possible right now." – INGO04

5.5   External Influences on Project Design to Reduce Disaster Vulnerability (T3)

The next theme to emerge resulted from the grouping of the category nodes government influence on project design (T3P1), donor driven influences (T2P2), and international political agendas (T2P3). Together this grouping of nodes and the relationship between these nodes can be represented as a group by the theme labelled "external influences on project design to reduce disaster vulnerability". Throughout many of the participants' responses, there were several statements that showed that external factors significantly impede good programme design.

5.5.1 T3P1 Government influence on programme design (T3P1)

5.5.1.1 Mention of government elections (T3P1C1)

Without being prompted, several participants mentioned the National Government elections and the role it might play in the humanitarian response. The candidates need to demonstrate to the public that they will effectively deal with the crisis, and this affects what humanitarian organisations are able to do.

"With national elections coming up in December, there is pressure on the current government to make promises for action regarding the refugee crisis … It is likely that the government will not change following the elections next month. The opposition leader has recently been sentenced to 7 years imprisonment for embezzlement. Some say that the claims were

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fabricated to compromise the election results. The current government is more progressive and has brought important change to the country. But their heavy-handed approach has sparked strong criticism." – INGO01

5.5.1.2 Bhasan Char plans (T3P1C2)

The national government has been pushing to move a large group of the Rohingya refugees to an island called Bhasan Char. This is a small uninhabited island in the Bay of Bengal and is deemed by many to be unsafe for human habitation. The government invested in improving the protection of the island, however, many humanitarians remained concerned that the island did not offer sufficient safety and livelihood options for the refugees.

"The government has stated that 30,000 will be sent back to Myanmar this year. There is also pressure to start using the camp built on the island, Bhasan Char … One the prime minister's advisers told reporters that, once there, they would only be able to leave the island if they wanted to go back to Myanmar or were selected for asylum by a third country." – NGO10

5.5.1.3 Funding restrictions (FD7) (T3P1C3)

Most foreign donations for humanitarian work are required to receive FD7 approval from the government. This places a restriction on what projects can be funded. In some cases they are rejected based on project duration, or the desired outcomes of the projects. Many respondents mentioned this as a key barrier to effective programming.

"The kind of programming that we're doing that is sort of supporting like kind of the most sustainable long-term solutions is obviously around livelihoods programming and education programming, to sort of build people's hope and, you know, the ability to support themselves and things in the future for sort of future facing programming. As opposed to just the more lifesaving immediate stuff that makes sure they have enough to eat, stuff that's happening

now. So, I think with, with [our organisation] and also more broadly with other organisations, but again, this is the thing that the government and various other parties are putting the biggest constraints on because obviously they don't want to encourage the population to stay here. With FD7s it's really difficult. It's difficult to get permission to do the kind of programming that supports, like, longer term integration." - **INGO10**

The following statement expands on the role of FD7s in restricting the options in the response. Many respondents cited the foreign donation restrictions as a negative influence on project design and in some cases the effectiveness of disaster risk reduction.

"FD7s at the beginning of the crisis they were issued for one month, three months, and now since maybe six months ago, they're issued for six months and now we're hoping to have them from nine months to one year. So they are aligned with the joint response plan but until then, we have to compromise the plan to suit" - **UN03**

In some cases, the donations were outright rejected. The statement below highlights how even large sums of money are being turned away.

"The government rejected some large donation because it didn't align with their goals, because it was focused too much on development and they want to, they don't want to see the population integrated instead of repatriation. So it's interesting, like sometimes even large sums of money it just rejected." - **INGO04**

5.5.1.4 Competing interests (T3P1C4)

Competing interests was identified as a contribution to ineffective disaster risk reduction activities. Based on the interviews, it was apparent that there were competing interests between stakeholders pushing for repatriation and those pushing for improving the long-term

outcomes of the camps. The two options are not intrinsically at odds; however, improving the camps reduces the chances of repatriation.

"If more funding goes through long-term funders, like the World Bank, the Asian Development Bank, who are willing to put money into long-term infrastructure. So it's surreal to feel the tension between those who feel that the best solution and the quickest solution of getting them back to Myanmar is best for everyone, and those who feel that making the camps better and enabling the environment to be, to facilitate more opportunities for Rohingya, can be combined with that longer-term vision of repatriation." **– INGO10**

5.5.2 Donor-driven influence (T3P2)

5.5.2.1 Donor-driven indicators (T3P2C1)

Many respondents mentioned the impact that donors have on their project design. Sometimes this was through the earmarking of donations, or other times it was through setting specific indicators to measure project success. These were often output-level indicators and did not allow for reflection on the longer-term outcome-level indicators. Organisations tend to understand the importance of this, in particular when looking at influencing disaster risk, however, the initiative needs to be internally driven. The following quote demonstrates how the outcome level monitoring only occurs because the organisation recognises that their required evaluation is below their standards.

"In a lot of our projects, we're generally just being asked to count things. We might have a couple of more outcome-level indicators. For example, looking at the effects we're having on the wellbeing of children. But I would say that it's not, and this is from the donor's side, there's

*not an awful lot of expectations and with most of our projects there's not a specific evaluation requirement. There might be some kind of outcome-level monitoring but it's more from **[our organisation]** saying, 'actually yeah, this isn't good enough for us'. We want to understand the outcomes and the impacts of what we're doing. But it's more internally driven, I think, than donor driven." – INGO13*

5.5.2.2 Cash-based initiatives (T3P2C2)

Several humanitarians expressed a desire to deliver more cash-based initiatives, believing that this improves numerous outcomes. Despite research supporting the effectiveness of these initiatives, donors are less likely to fund these activities. This is also influenced by government restrictions and this code is also linked to Government Influence on Programmes (T3P1) in the thematic network map.

"Well, I think what we need to see in the future is a bigger focus on cash interventions and income-generating activities or something, because people need to, I mean, they don't need full development, but people need to be able to, to look after themselves. Otherwise we create a generation of people that are completely dependent. And then we need to start talking about education and what kind of education system we want to put in place to make sure that we don't have a lost generation of children. Without this, there is no chance to improve disaster resilience." – INGO02

Beyond the improved outcomes, some respondents preferred cash-based initiatives because it helps to avoid the difficulty that is faced when trying to assess needs. They claim that even with extensive research, it is impossible to accurately assess the needs of a large group of people.

"People have all sorts of needs that are not met by the, by the humanitarian community; this could be [a] religious thing for religious festivals or for just about anything, really. Anyone in the world who gets paid any kind in any kind of job. We'll find a way to try and turn that into cash because people are used to making their own choices and having something they can store safely and that they can use in small quantities for emergencies, for social transactions, helping other people So, yeah, I think it's unavoidable" – UN04

5.5.2.3 Short-term focus (T3P2C3)

Lines within this code were often dually coded to government influence, donor influence, and international political agendas. This is usually because the short-term focus is caused by these influences. The organisations showed a desire to address the medium and long-term drivers of vulnerability but feel restricted. This results in many of the projects being a compromise of what the organisations feel would better address disaster risk. The quote below highlights how their organisation is grateful for the generosity of the government, however, understands that it constrains their operations.

"Honestly, and again, I think this is something that's not unique to this context. With a lot of humanitarian funding, the expectations are a lot lower than longer-term development programming where you get much more rigorous stuff around evaluating impacts and looking at the longer-term outcomes and doing some more kind of proactive data collection looking at baselines before or after comparisons … obviously, we're extremely grateful for the generosity of the government. But we have faced some challenges in implementation, which has caused some delays, especially at the beginning of that response, to focus on some programmes. One of them, for instance, education, but also in shelter. So the approach from the government has been very, like, short term, like, very short-minded focus, which has had

an impact in how the international community has responded to the crisis and how we're able to operate." – INGO08

"Humanitarian work is always, you know, it is by nature and design, it's meant to be lifesaving and is not meant to be a 15-year prospect and is deeply inadequate in the longer sense of how we understand displacement today and how long people are usually displaced for. So, in terms of what is totally not good enough, then I think the shelters. One thing we did have was no cyclone last year by the grace of God. But if we had, I mean we had even just tiny cyclone and the camp would look like a pile of toothpicks." – UN05

5.5.2.4 Temporal perspective of cash flow (T3P2C4)

There is an understanding amongst the interviewees that the donations directed towards this crisis will eventually dwindle. Once the crisis drops from the news cycle and the global focus shifts to a larger or more recent crisis the funding will be diverted. This understanding influences the strategy for humanitarian organisations. They are prepared for a reduction in funds in subsequent years and need to make compromises accordingly.

"Eventually we will be able to build using kind of half a brick wall and a bit of concrete and treated bamboo. That's the basic need, but again, doing that in the second year of a response when donors are already starting to get tired of giving money. Like we expect the money to decrease in the next year, from now on basically. And so having to rebuild more expensive structures now is going to be difficult for us as a sector." – INGO09

5.5.3 International political agendas *(T3P3)*

5.5.3.1 Myanmar open to repatriation (T3P3C1)

Many of the interviewees expressed a disbelieve that the Myanmar invitation to repatriation was genuine. It is understood that the Myanmar government stated this for political reasons despite the lack of safety or rights for the Rohingya people if they were to return. Many humanitarian workers remained concerned about their safety in spite of government claims.

*"**[Our organisation]** is working on the assumption that this will be a protracted crisis. Partly due to what we saw with the Korean refugees in Thailand from the 90s. Also the previous influx here, there's still a hundred thousand refugees here from the influx years ago. And the way that refugees were repatriated, there was no safety provided or voluntary choice previously. That was kind of allowed to happen because many reasons, but there's now a lot more of international attention on the crisis. So it's unlikely that would be allowed to happen without an enormous amount of international outcry. I think that would be too much in social pressure for that not to happen" – INGO03*

5.5.3.2 Compromising principles and standards (T3P3C2)

Most respondents appear to have a pragmatic approach to their work. They are operating in a complex environment with many competing interests, and it is generally understood that compromising your principles and standards is sometimes necessary in order to complete the task. In some form or another, many respondents claim that it is better to complete a compromised project than to not do it at all.

"I mean, we have all these principles and standards that we tried to reach. They're impossible to reach ideally. But I think they're useful to have because it means that we can take a stance. One of the main issues is that our donors are mostly government donors. So it's the

government aid programmes that give us money. So they obviously come with potential,

depending on the, the aid, but can come with the political agendas, which can affect how we

program." – NGO06

5.5.3.3 Lack of freedom of information (T3P3C3)

Respondents reported that a lack of information was detrimental to the effectiveness of the

response. This was in relation to both the access to information for the refugees, but also the

information that was available to humanitarian organisations. The lack of communication for

the refugees negatively impacts their ability to mitigate risk. The lack of information for

organisations prevents them from making informed decisions in the best interest of the

beneficiaries.

"Even at the start, the refugees couldn't have phones or radios let alone internet access. It is

hard for them to do their own research. Rumours are still how a lot of information is spread in

the camps." - INGO04

This quote demonstrates that the freedom of information is not just limited to the refugees.

Many of the humanitarian practitioners reported not having enough information to make

informed decisions. In this context it was usually in relation to conditions on Bhasan Char.

"We still don't have all the information we need. We are trying to find out more about the

island, we can't argue against it because we don't know. I think it is a bad idea, but I don't

know" – INGO07

5.6 Organisational and Coordination Issues Affecting Programme Outcomes (T4)

The next theme to emerge resulted from the grouping of the category nodes cluster approach (T4P1), monitoring evaluation and learning (T3P2), lesson sharing (T3P3), and staff turnover (T3P4). Together this grouping of nodes and the relationship between these nodes can be represented as a group by the theme labelled "organisational and coordination issues affecting programme outcomes".

5.6.1 Cluster approach (T4P1)

5.6.1.1 Mainstreaming of DRR (T4P1C1)

Many interviewees mentioned that they believe it would be beneficial if the practice of disaster risk reduction was better mainstreamed across all activities. Some were concerned that it is primarily discussed only within shelter and camp planning activities.

" Now we really need to start strengthening whatever system is there. So that it becomes more sustainable and that links with long-term development perspective as well, because now we're very much aware of the new way of working in terms of, if you are doing emergency work, you also need to be thinking about development programming. And as much as if you are to do development work, you should also be talking about the emergency preparedness. So we're very much cautious about that in all the work that we do." – INGO03

5.6.1.2 Issues with coordinating body (T4P1C2)

This crisis is unique to other displacement events, as the camp coordination is shared between two bodies, the UNHCR and IOM. The camps were split between the two and were operated in slightly different ways. Interviewees identified that this sometimes presented a challenge in coordination.

"It has been very challenging, because of the different ways that IOM and UNHCR are set up. They separate the camps by which one of them is managing and they have different ways of operating. So, for example, there was something with our health team where we couldn't call an IOM ambulance for UNHCR camp. So it makes the referral system a bit more difficult. It makes complementarity and coordination between our programming a bit more difficult." - **INGO04**

5.6.1.3 Critique of UN approach (T4P1C3)

Similar to the issues that were highlighted in the "mainstreaming of DRR", some respondents expanded on this through a critique of the siloed approach overall. Some see the approach as a hindrance to an integrated and effective approach.

*"Because **[our organisation]**'s working across seven different sectors. We try and do it, in an integrated way, both in terms of geographic integration, in terms of, like, where our services are located. But also, for example, we started trying to integrate MHPSS, which is mental health and psychosocial programming, into our health services and into our child protection services as opposed to doing lots of different types of programming kind of quite discreetly."* **– INGO05**

"From [the] agenda mainstreaming point of view [it] is that everyone will talk to you about coordination. I kind of see that everyone's very siloed in their thinking. So gender-based violence subsector is focused on how women, child protection sector is focused on children and usually children under 12. And there's a little bit of cross pollination, but like one or two people may go sit at the different coordination meetings, but there's not much in terms of like intersectional thinking and you don't tend to get people talking about women with disabilities or adolescent girls' disabilities, for example, or kids who identify as gay, or I think because of

the immediacy and because of the need, you kind of just end up focusing on the obvious." –

INGO06

5.6.2 Monitoring, evaluation, and learning *(T4P2)*

5.6.2.1 Lack of feedback from beneficiaries (T4P2C1)

A lack of feedback from the beneficiaries has been a cause for concern among many humanitarian workers. They have systems in place to collect feedback and data from the refugees but find that they are under-utilised. Some make reference to a lack of trust and others have mentioned the systems not being appropriate. This is a key missing component in the monitoring, evaluation, and learning process.

"Even though we've got a pretty good accountability system for collecting feedback and complaints and responding to them, we'd be working with hundreds and thousands of children and, every month we only get like probably 20 feedback or complaints from kids. So there must be something wrong." – INGO02

5.6.2.2 Reliability of data (T4P2C2)

A lack of reliable data was identified as a barrier to implementing effective programmes. Several interviewees mentioned that the data they had was either insufficient or unreliable. Two of the main reasons cited for inaccurate data was double counting or a lack of standardised questions.

"Like the specific kind of what the idea is around double counting. So when we're trying to track beneficiaries, because of the integrated nature of our programming, which makes sense in terms of, you know, if we're doing health programming with it, with the community, we're

also doing wash programming and the different types of programming is complementary." –

INGO02

"And quite often the initial data collection is not done by using the right set of questions. The agency doing data collection for a new influx of refugees, most likely you will be doing an official assessment of the disability and you will ask the standard prompt 'Does anyone in your household live with disability?', your family, and most likely the person, will say no even if they do because there is still a stigma and people try to hide it if they can. And also the visual assessment; it doesn't necessarily tell you much about any visual hearing impairments, intellectual impairment. So quite often agencies do not apply the tools that we have to do a proper assessment that will include having questions like, 'Do you have difficulties in dressing up? Do you have difficulties in moving?' and 'Do you have difficulties in talking with your family?' It doesn't ask about disability as such. It addresses the issue in a different way, in a more accessible way without the stigma associated with it. So data were collected very quickly. And what now we are in the process of starting, well, they have already started the verification exercise, which means that they are registering, I'll say they are, they're verifying the registration of all the different beneficiaries." – INGO06

5.6.2.3 Focus on output-level indicators (T4P2C3)

A focus on output-level indicators was identified as a barrier to long-term improvements in the camps. The output-level indicators are easier to measure and can provide immediate feedback to the donors. However, they do not show if the outputs led to the desired outcome or impact. Interviewees mentioned that this was often all that was required of them in reporting. Additional outcome-level indicators were usually internally driven and required more time to complete.

"It also means that the same children and community members are participating in different types of our programming. And then also in terms of the way that our awards worked because they're multi-sector and it's to do with the timeframes and things, it's quite difficult to count people. So we ended up spending a lot of time and energy on the basic working out how many people we've reached and, like, the unique numbers. Like they're kind of the real, like, bread and butter, like, basics of monitoring, which means that we have less time and energy and effort to be able to spend on the, the more interesting kind of higher-level stuff. And looking at the actual outcomes of what we're doing and seeing the kind of change that we're making beyond just counting, like the number of people we're getting toilets to or whatever. So that's unique to this response." **– INGO02**

5.6.3 Lesson sharing (T4P3)

5.6.3.1 Sharing between organisations (T4P3C1)

A participant mentioned that formalised lesson sharing between organisations is below expectations. It is more likely to occur through informal means such as staff moving organisations, or through friendships. A lack of time is cited as the main reason behind this.

"We have working groups, that's the main way we share ideas. But even that is pretty limited. Probably the main way that lessons are shared are through staff. Everyone moves around a lot. The locals will work for lots of organisations and ideas or lessons are shared more informally. There should be more of this but it's really just not a priority, we are just too busy for more meetings, for more workshops." **– NGO09**

5.6.3.2 Sharing between regions/deployments (T4P3C2)

Participants from INGOs were more positive about the lesson sharing, however, most highlighted that it was mostly occurring between regions and deployments rather than between the individual organisations in Cox's Bazar.

"[We] would do like a big lesson-learning workshop after the pilot and sort of say what's working, what's not working, how would we scale up, and then there's the Asia regional office, and they would be the ones who'd be responsible for synthesising the learning that's come from this response. And then, like the earthquake response in Indonesia and different responses around the region, and sort of collating it and synthesising it at the regional level. Yeah. And then all the different regions would do that. And then at the, what's called the centre, the head office in London, and they would integrate it on the global level." – INGO07

5.6.3.3 Sharing with private sector and local capacity (T4P3C3)

Sharing with the private sector and building local capacity is a key consideration for many of the organisations working in the area. Several interviewees mentioned that they were engaged in this process, however, were experiencing challenges. Some interviewees stated that the humanitarian work is wasted without an effective transfer of knowledge. A common issue that arises is a lack of capacity in some industries mentioned in the code **(T5P1C2)**.

"We're going to have lessons learned, workshops and other activities to see out our strategy. I'm also in charge of ensuring that we build national capacity of national staff because they are the ones that will be here in the long run. So I have to ensure that there is a systematic professional development programme for that one. I look into their training needs and also their capacity [that] they have, and then they come up with a tailored training capacity

building programme that includes actual training sessions, supervision, coaching, and mentoring and things like that. Without this, our time would be wasted." – INGO02

5.6.4 Staff turnover (T4P4)

5.6.4.1 Building working relationships (T4P4C1)

Building up working relationships was identified as a crucial step in effective humanitarian work. These relationships include between the beneficiaries and the humanitarian organisations, but also include other working relationships such as with the private sector, host community, and government. High staff turnover is often cited as a barrier to building effective relationships.

"And honestly, I think the main challenges being around staff turnover, again, I don't think that's particularly unique to [our organisation] or to this response, but I think it has been worse than, like, other places for various reasons. So obviously, you know, if you're trying to build the quality of what you're doing and kind of build up momentum this needs to change. I think a lot of people think of, like, monitoring and evaluation is a very technical kind of thing. But a lot of it is actually based on relationships cause it's not just about, you know, pulling out numbers and putting things in spreadsheets. So we need long-term staff that can build these relationships" – INGO07

"It's like then working with the teams to actually use, kind of use the data and, like, try and build sort of a culture of relationship-driven decision making. So if the people keep on changing then we can't build that culture, it can't just be taught straight away." – INGO03

5.6.4.2 Limitations on salary and opportunities (T4P4C2)

A high level of staff turnover is identified as a major issue in numerous ways. Additionally, the interviewees did not believe that it was going to improve in the near future. They see the decisions to leave organisations as justified due to the better opportunities in other organisations, or in different sectors.

"We lose staff all the time. I get it, you have to give up a lot to work here. Family, friends, and money compared to working back home. It is even hard with the development opportunities. We get lots of experience but it is not formal and not recognised. I think we are attractive for locals but expats will always come and go … there's relationships you, like, build the capacity of people and then they go off and join other organisations that pay better or, you know, would have a more attractive package. So I think then all of the, the technical issues and stuff, a lot of it kind of springs from that basic challenge." - INGO07

5.6.4.3 Turnover as a barrier to improvement (T4P4C3)

The high level of turnover is regularly seen as a barrier to improving the operations of the organisations, either from vacant positions leading to reduced capacity to improve through lost institutional knowledge or the slow recruitment and training processes.

"There is often a gap, and there is a bit of a gap here in reports and evaluations feeding into our programmes, like closing that loop and feeding into our programme design. That's partly because there's been a gap in my position for a long time and we've had huge amounts of turnover in the team. So they've been focusing on recruitment rather than existing staff." – INGO08

"Just because if someone is coming for, like, three months, implement their project, they're focusing on that. And after that, when he left, there is a new one and he said, no, forget about

this one. We will be implementing that and then that decision changed. So what happens, like, with that one? We tried to look at the materials. We tried to prepare our designers our plan, except that all things have changed. So what to do with that? Staff are coming for, like, six months; previously, it was like three months, But now they are coming for a longer time. So now the things are becoming steady, steady sectors." **– INGO05**

5.7   Social Cohesion and Equity Issues Not Sufficiently Addressed by the Humanitarian Sector (T5)

The next theme to emerge resulted from the grouping of the category nodes localisation of NGO labour force (T5P1), strain on local resources (T5P2), and integration and equity with humanitarian aid (T5P3). Together this grouping of nodes and the relationship between these nodes can be represented as a group by the theme labelled "Social cohesion and equity issues not sufficiently addressed by the humanitarian sector".

5.7.1 Localisation of NGO labour force (T5P1)

5.7.1.1 Poorly managed impact of INGO/expats on region (T5P1C1)

It was identified that the impact of international organisations and humanitarian workers was poorly managed. There were reports of organisations contributing to inflation and disrupting local markets. Some respondents suggested that more research could be done in this area.

"Another problem is that we come in and all of our people need somewhere to live. And so rental prices go up. We rent places, warehouses without doing due diligence and some people make the most of it. So there's a lot of disaster capitalism or opportunism. I don't think that could necessarily always be avoided, but we could definitely be better at coordinating as a sector as to like, okay, what, what standard rates are there? What are what you guys paying,

*you know, what properties are you looking at? Like that kind of discussion is very important in the initial stages of the response." – **UN04***

*"Even with large organisations such as **[our organisation]** there are questionable recruitment processes at play. Many of the local employees are only in the lower positions of the organisation and are on a much smaller salary. One local employee with a degree said that her salary was hardly enough to pay for the hotel where she needed to stay. They determined it according to the cost of living in the area but didn't to take into account the rising cost of living due to the presence of many INGOs. Whilst foreign 'professionals' have a much higher salary inclusive of accommodation costs." – **INGO01***

5.7.1.2 Lack of capacity (T5P1C2)

A lack of capacity in some areas was reported by the interviewees. In some fields it is considered a key barrier to the localisation of humanitarian activities, a crucial step in improving long-term outcomes. In some cases, the professions did not exist or were scarce in the area prior to the humanitarian work. In the following examples, they express a lack of capacity in midwifery and child protection specialists.

*"I think we always talk about the low capacity of national staff in the field. That's something that always comes up, technical capacity. But there is case management because, you know, social work doesn't exist as a profession. So you're training people from scratch. And, I mean, it's the same thing with midwives. This is only the third batch of midwives, and the quality of the midwives is really low. The quality of staff that come here is also quite variable. And that's an issue when expats are supposed to be providing capacity or training to national staff, but then they don't necessarily have the capacity to do it." – **INGO08***

"It's not funding. That's okay. But if social work doesn't exist as a profession, you don't have child protection practitioners pre-existing in Bangladesh. Let alone those who speak the local dialect. So with the humanitarian response, you suddenly just scale up your case management services and you have to recruit locally because they need to get to speak the language, to provide casework support to kids. So when you recruit locally, you're recruiting people who speak the language and you're looking for empathy and a bit of emotional intelligence, I guess, but not an expert, you can't really recruit the casework skills because they don't exist." –
INGO11

5.7.1.3 No localisation of decision-making roles (T5P1C3)

It has been identified that there is a lack of localisation in decision-making roles. Interviewees mention the localisation process generally taking place later in the response and non-decision-making roles. Some express that this is a cause for concern and that the local community members need to be involved earlier and in higher levels of the organisations.

"We should, should as much as possible, empower the local community and the local partners to a response or need. But that doesn't really happen; we hamper that because we come in and immediately hire a lot of local people, but a lot of those people who have NGO experience, we're working with local partners for the last 10, 20 years. And so, we immediately hampered the ability of local partners to take on those roles. And then we start working with local partners a lot of the time through the kind of implementation relationship where we say, we designed a project, and we'd decide what should happen and when. And then we say, we need you to go and just read this over there and we need you to go implement. So it's not really an empowering strategic relationship. I mean it makes sense sometimes, if there's an emergency with 100,000 people who've been displaced and you need to get them food or access or

whatever, then sometimes that makes sense. But in a situation like this where we do have

access it should be different. A lot of the NGOs didn't come in with the right approach. One of

the first questions should be, who are the local partners? What's their capacity? Who can we

work with? Like, who can we bring into our conversations about our response strategy?" –

INGO12

5.7.2 Strain on local resources *(T5P2)*

5.7.2.1 Construction materials (T5P2C1)

Construction materials were strained during the response. Interviewees mentioned that they
are difficult to procure and there is increased local competition. They are attempting to
mitigate these effects through importing materials; however, inflation and scarcity remains
common on many materials.

"It's really imperative to also support the host communities because, you know, automatically

they will be stretched and there will be issues and competition around resources, construction

materials, food, land. And again, with all indicators pointing to this emergency turning into a

protracted crisis, it's imperative for us to reflect how we've really engaged the host

*communities and also support them so they are not left without materials" – **NGO05***

5.7.2.2 Deforestation (T5P2C2)

The extensive deforestation in the region has been identified as an issue for sustainability
concerns, ecological impacts, and hazard intensification. Some deforestation was deemed
necessary to shelter the refugees, however, additional deforestation was occurring to fuel
stoves. There was an attempt to mitigate this through the distribution of LPG stoves; however,
the impact of deforestation remains for both refugees and the host community.

"The area was just dense hilly forest before. But it was the only area so now it is stripped and creating more issues. Until we brought in the LPG, it was worse; all the wood was being stripped for cooking. It makes flooding worse, it makes landslips worse, it makes draining worse." – NGO02

5.7.2.3 Infrastructure strain (T5P2C3)

Infrastructure in the region is strained with the increased population of humanitarian workers and refugees. Roads become more congested and local amenities need to be shared between a greater population.

"The dramatic increase in population has strained resources, infrastructure, public services and the local economy. The most affected areas are Ukhia and Teknaf, but the impacts are still evident across the state. Some of the pressures include rising food, firewood and transport prices. Additionally, there is scarcity of clean water, basic services, natural resources, and employment. Before the influx, 33% of the population lived below the poverty line and one in five households had poor food consumption patterns." – NGO05

5.7.3 Integration and equity with humanitarian aid (T5P3)

5.7.3.1 Potential conflict with host community (T5P3C1)

A key consideration in decision making within organisations is reducing the chances of a potential conflict with the host community. Many respondents mentioned the growing tensions culminating in large protests and isolated disputes. There are dedicated peace-keeping activities, but it is also considered in the design of all projects.

"We need to be working much more with the host community. So that's a big part of our strategy moving forward is to see how we can link our programming between the Rohingya

and host communities. For many reasons, including, you know, to help with integration because the host community is also extremely vulnerable and in need. And to, like, quiet down a bit of the potential conflict that can happen, because even now there are protests going on"
— INGO03

5.7.3.2 Mention of socio-economic status of hosts (T5P3C2)

It was commonly acknowledged that the socio-economic status of the host community was already low. Shelter in the region is often below standard and available land is scarce. This was further stretched by the arrival of the Rohingya refugees. The humanitarian organisations recognise that aid cannot be given exclusively to refugees when the host community is also lacking protection from hazards.

*"There are major issues with equity within Bangladesh. For example, when designing shelter for refugees there are minimum requirements like having at least 4.5 m^2 for each resident. In many cities in Bangladesh it is common for the local residents to have less than this. As conditions improve in the refugee camps, we need to ensure that there is equity and that the locals do not suffer from the presence of the humanitarian actors." **— UN04***

5.7.3.3 Disparity in assistance (T5P3C3)

It was identified that in some projects the refugees were receiving better access to protection than the host community. Interviewees expressed concern, saying that humanitarian aid needs to be expanded or risk large disparities appearing between groups.

"For refugees we built everything [when referring to latrines], right; we pay for and build everything. For host community, we call it CLTS, community led total sanitation. It's zero amount of money from humanitarian actors. It requires the resource instead of INGOs resource. So what did they give the, they give this, they give a training, they give the training.

So INGO give the training meeting again, meeting, setting the committee and give the training and in work and empowerment. In refugees empowerment only 20%, 80% from NGOs. But in here, the other way around, you see the developed, you see the gap, right? In Host community you need 20% as resource, 80% empower, which unique. So in some communities they accept some cannot … But you cannot meet the requirement for all right. So that's, that's the, the challenge. And then insisting to do that with the pure development approach we are in trouble, right. Because host community, they see very refugees getting everything well for us, you need us to discuss and then we need to build our own toilet, for instance, we built our own drainage, for instance, don't pay refugees. So that's the challenge." **– INGO12**

5.7.3.4 Resistance to integration (T5P3C4)

Many humanitarian workers expressed a need for better integration. They see this as a long-term crisis and integration with the host community is seen as a logical step. There is resistance to this move from the host community and the Bangladesh Government.

"We know that, you know, there are many camps around the world now that have been necessary for 20, 30, 40 years. It's not really a sustainable model. So I think there needs to be a wider conversation in the humanitarian sector about how we respond to large groups of people. But the problem, of course, that needs to be a conversation with the governance because most governments and most populations of host countries don't want a million people to suddenly be in the towns. So it's a problem with the nation state and with the idea of a homogenous group that should be part of a nation state. This problem with this type of patriotism and the, like, philosophy that comes with everything nation state. So there's a lot that needs to be worked out in order to solve the refugee camp." **– UN02**

5.8   Diagramming of Results

<u>Figure 19</u> shows a thematic network analysis map based on the concept from Attride-Stirling (2001). The thematic network analysis goes a step beyond the codebook and presents the themes through path analyses and networks which provides an effective visual representation of the relationships between the concepts (Guest, 2012). This technique provides an additional layer to demonstrate that the findings are representative of the raw data. Additionally, it displays some relationships that could not be fully represented in the table. There are some child nodes that relate to one or more parent nodes, and parent nodes that relate to one or more themes. These additional relationships can only be demonstrated in the thematic network analysis map.

Figure 19: Thematic Network Analysis. Author Supplied

5.9 Revisiting the PAS Table in the Case Study Context

Table 8: *Progression of safety revisited*

Progression of Safety	Activity	Previously assumed limitations with humanitarian operations	Actual limitations in Case Study
Address Root Causes	**Increase access of vulnerable groups to power structures**	Humanitarian organisations can advocate on behalf of refugees. However, host governments can be restrictive on the influence of international organisations.	Advocacy was reported to be the way to give a voice via proxy for the displaced population. Some success has been seen in this way with lessening of some key restrictions on programmes.
	Increase access of vulnerable groups to resources	Organisations generally can address this through establishing markets and prioritising integration projects with host communities.	Limitations in the region prevent humanitarian actors from providing cash-based initiatives that could support the establishment of full markets.
	Challenge any ideology, political system where it causes or increases vulnerability	Humanitarian organisations can advocate to disrupt systems that increase vulnerability; however, they are restricted by government and donors.	It was reported that the biggest challenge in this field is influencing culture within the displaced that increases vulnerability.
Reduce Pressures	**Development of local institutions**	NGOs may not have a long-term presence in refugee camps, which can limit their ability to support the sustainability of local institutions over time. When NGOs leave the camps, their projects may not continue to be sustained by the local actors and communities.	In the case study they faced political pressure which limits their ability to support local institutions that are independent of these actors. Lasting institutions go against the strategy of repatriation.
	Development of education, training, and appropriate skills	Organisations can be limited by governments to only develop education appropriate for the displaced population's former location. There is external pressure to encourage repatriation.	Restrictions were placed on curriculum. Bangladesh prohibits humanitarian groups from providing education for Rohingya refugee children beyond basic, informal, primary-level classes. Education cannot be based in the Bengali language and using the Bangladesh curriculum.
	Development of local investment and markets	NGOs may be limited in their ability to address the root causes of economic vulnerability in refugee camps, such as lack of access to land, resources, and opportunities. Additionally, INGOs may not	Significant government restrictions are in place preventing the development of markets and local investment.

		have the necessary knowledge or expertise to understand the local economic context or to identify the most effective strategies for promoting investment and markets.	
	Development of press freedom	NGOs operating in refugee camps may be dependent on funding from host countries, which can limit their ability to advocate for free press or freedom of speech. Many refugee camps are located in remote or difficult-to-reach areas, which can make it difficult for NGOs to establish or support media outlets in these areas.	Press freedom is limited with refugees not able to access radios and humanitarian practitioners limited in the information they can receive about some aspects of the response.
	Development of ethical standards in public life	NGOs may have to navigate different cultural and ethical practices of the host country and the displaced population which can cause conflicts in what is considered ethical or not.	Practitioners reported difficulty in navigating different cultural and ethical practices of the displaced population. Some programmes were implemented to influence ethical standards with limited success
	Population, health programmes and managing urbanisation	NGOs may have difficulty addressing underlying structural issues such as poverty, inequality, and political instability, which can exacerbate the challenges of rapid urbanisation, population growth, and health programmes in refugee crises.	Managing population growth and urbanisation is often beyond the capacity of the organisations. They have some programmes designed around family planning however it is a culturally sensitive topic and they have had little success.
	Adapt arms industry for development purposes	Limited influence beyond advocacy	Not relevant in this context
	Reschedule debt payments	Limited influence, however, if micro-credit is to be used, it should be on soft terms.	Not applicable with no micro-credit schemes used in this response.
	Re-afforestation	Re-afforestation projects require active participation from the community to be successful. NGOs may have difficulty engaging the refugee population in the project, particularly if they are preoccupied with other pressing issues such as food	Re-afforestation was initially addressed through providing LPG to replace wood fired stoves. Limited re-afforestation is taking place to stabilise slopes.

Achieve Safe Conditions	Safe locations	Relocation, even to a safer location, has a negative effect on other vulnerability factors.	Some relocations have occurred due to unreasonable landslide risk. Relocation is always voluntary.
	Hazard resistant buildings and infrastructure	The location of the refugee camps, the terrain and climate of the area, the local laws and regulations, the availability of materials and labor, and the accessibility of the location, all can be further limitations that the humanitarian sector may face in creating hazard resistant buildings and infrastructure.	Construction materials are restricted to avoid a sense of permanence. Most shelter is primarily bamboo and tarpaulin reinforced with tie down kits and some footings allowed to prevent rot in the bamboo.
	Diversification of rural income opportunities and strengthen livelihoods	The displacement situation often changes rapidly, and it may be difficult to create long-term solutions, as well as there being a lack of proper infrastructure and resources within the camps to support livelihood activities. There may be security and safety concerns within the camps that can limit the ability of displaced people to engage in income-generating activities.	The humanitarian sector is unable to undertake cash-based initiatives and are unable to support the Rohingya into paid employment. Some opportunities are purported for those relocated to Bhasan Char.
	Increase low incomes	In many cases there are no incomes to increase. Organisations can build skills and capacity to improve income opportunities or through cash-based initiatives.	The humanitarian sector is unable to undertake cash-based initiatives and are unable to support the Rohingya into paid employment.
	Increase disaster preparedness and improve early warning systems	Organisations can struggle to identify the specific needs and vulnerabilities of displaced people in the design and implementation of disaster preparedness and early warning systems.	Early warning systems are primarily based on a three-flag system. There are not adequate cyclone shelters however public buildings are used as makeshift shelters during storms.

5.10   Chapter Summary

Chapter five has presented the findings from a qualitative phenomenological case study analysis from the Rohingya refugee camps in the Cox's Bazar region of Bangladesh. The analysis was based on the interpretation of the multiple views of participants from semi-structured interviews with INGO, local NGO, and UN employees operating in the Rohingya refugee crisis response. The analysis was completed using computer-aided coding (using Nvivo) in a seven-step analysis process informed by the guides published by Guest et al. (2012), and Saldaña (2015). The grouping of child nodes into categories saw five key themes emerge within the data which provide some insight into the barriers to reducing disaster vulnerability in this context. The disconnect between knowledge and operations was the first recurring theme, with some activities not matching the known best practice. The second theme found that there was a lack of use of supporting livelihoods or improving access to resources as a means of reducing disaster vulnerability. The third theme showed that many of the projects and activities were influenced by external forces inhibiting desired outcomes. The fourth theme showed the extent to which organisational and coordination issues affect programme outcomes. Finally, the fifth theme identified how the social cohesion and equity issues were not able to be sufficiently addressed by the humanitarian sector. The relationships of these nodes, categories, and themes were diagrammed in the thematic network analysis map. The findings documented in this chapter will structure the discussion in chapter six and inform the revised conceptual model.

Chapter Six – Discussion

6.1　Introduction

This chapter aims to provide a deeper understanding of the five key themes that emerged from the results chapter, contextualised the ideas within existing literature. The results chapter presented the findings of the data analysis, whereas this chapter will interpret those results in the context of the literature and provide propositions about their implications for theory and practice. The chapter will fulfil objectives 2 and 3 of the study by providing a comprehensive understanding of the issues at hand. Figure 20 below provides an illustrative representation of the framework for this chapter. The chapter will revisit the propositions made in chapter two and revise them based on the emergent themes. Additionally, a new model will be presented, showcasing the resource allocation and focus of efforts in humanitarian responses. This will help to show how resources are allocated and how they impact the outcome of the humanitarian response in regard to disaster vulnerability. The chapter concludes with a revised illustration of the conceptual framework, providing a comprehensive understanding of the research and its implications. The research in this thesis aims to fill gaps in the existing literature by providing new insights into the key themes that emerged from the data. The findings of this study have the potential to contribute to the development of more effective policies and programmes for displaced people, and to inform the future direction of research in this field. The chapter will provide a detailed discussion of the implications of the findings for theory and practice and will help to identify areas for future research.
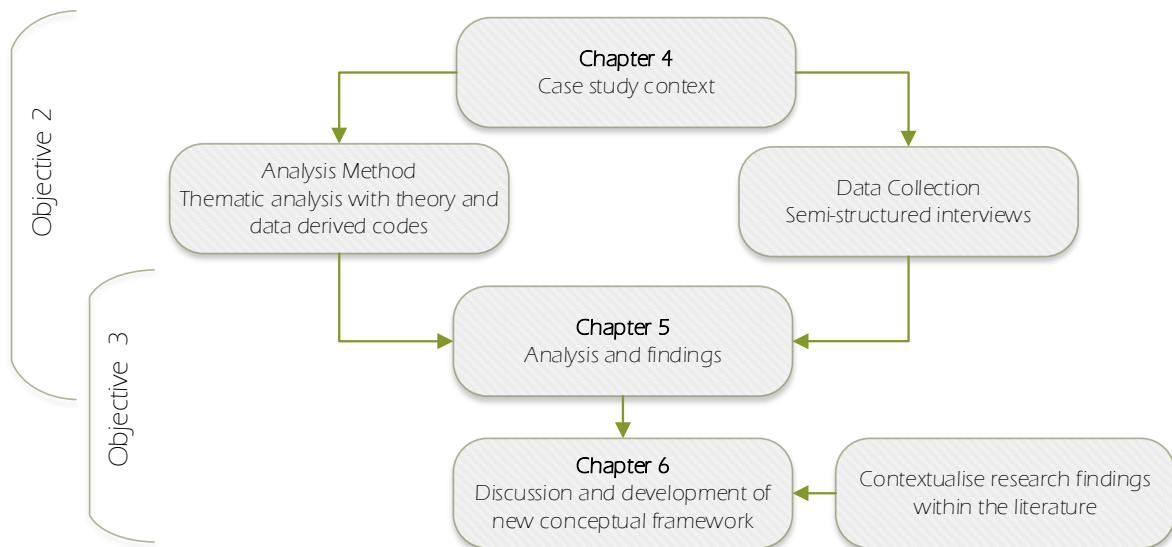
Figure 20: *Chapter six section of research framework*

6.2 Discussion on the Disconnect Between Knowledge and Humanitarian Operations

Throughout the interviews, a common theme emerged highlighting a pertinent disconnect between knowledge and implementation. It is alarming to observe this persistent disconnect between the collective knowledge of humanity and its actual implementation and funding of activities. This disconnect is attributed to a number of factors, including conflict, misuse of power, corruption, poor governance, lack of political interest or will, as well as more subtle issues such as silo thinking and competition among different sectors, interests, and actors at different scales. To effectively implement Disaster Risk Reduction (DRR) strategies, it is essential to have a balance of top-down and bottom-up initiatives. However, an ongoing challenge is the establishment of local ownership and the integration of DRR into daily life and livelihoods in a sustainable manner. This disconnect has been previously discussed in Wisner et al. (2011) handbook on disaster risk reduction, with the interview data expanding on some of the same aspects.

Poor policy can be a major obstacle to effective implementation of disaster vulnerability reduction activities among displaced populations. Organisations may have a good understanding of the vulnerabilities of displaced people and effective strategies to reduce those vulnerabilities, but if policies and regulations do not align with these strategies, it can be difficult to put that knowledge into practice. This is because policies that are overly restrictive or not aligned with the specific needs of displaced people can impede progress and hinder the ability of organisations to effectively address the needs of displaced populations.

Identified within interviews, and within literature, many policies and regulations in place in humanitarian organisations do not align with current understandings of disaster vulnerability (Zuccaro et al., 2020). Policies and regulations that are not aligned with the specific needs of displaced people can limit the ability of organisations to respond flexibly to the evolving needs of the population. This is echoed in the concerns raised by the participants in this study as shown in under the code – critique of uniformed policy **(T1P1C3)**. The long-term reduction of disaster vulnerability requires policymakers to ensure that policies and regulations align with current understandings of disaster vulnerability and are flexible enough to respond to the evolving needs of displaced populations. This would enable organisations to effectively implement strategies that address the vulnerabilities of displaced populations and reduce the risk of displacement due to hazards. In order for humanitarian organisations to influence policy decisions, it is necessary to engage in advocacy.

Within the interviews, a lack of advocacy emerged as another contributing factor to the disconnect between knowledge and implementation of disaster vulnerability reduction activities among displaced populations. Organisations may have a good understanding of the vulnerabilities of displaced people and effective strategies to reduce those vulnerabilities, but

if they do not advocate for these strategies and the needs of displaced people, they will have difficulty getting the support, resources, and policy necessary to put them into practice. This can be a significant barrier to progress in reducing vulnerability among displaced populations.

A study by Crisp et al. (2012) found that many humanitarian organisations lack the resources and capacity to effectively advocate for the rights and needs of displaced populations, which can impede progress in reducing vulnerability. Another study found that advocacy is crucial for obtaining the necessary resources and support for disaster risk reduction activities, and for promoting the inclusion of affected communities in the planning and implementation of these activities (Hollis, 2015). Furthermore, advocacy is essential for building partnerships and networks among various stakeholders, including communities, governments, and the private sector. These partnerships and networks can help to mobilise resources and support for disaster vulnerability reduction activities, and they are critical to progress in reducing vulnerability. Hence, it is valuable for the humanitarian sector to prioritise advocacy in their efforts to reduce disaster vulnerability among displaced populations. This can involve building relationships with decision-makers, and working with communities, governments, and the private sector to advocate for the rights and needs of displaced populations and the strategies that are necessary to reduce their vulnerability.

A lack of understanding of disaster theory is a clear contributor to the disconnect between knowledge and implementation of disaster vulnerability reduction activities among displaced populations. Organisations may not fully understand the underlying causes of disaster vulnerability, the factors that contribute to displacement, and the most effective strategies for reducing vulnerability, which can lead to an overemphasis on short-term, symptomatic solutions rather than addressing the underlying causes. Many participants involved in this

study claimed to lack a comprehensive understanding of the underlying causes of disaster vulnerability, and the most effective strategies for reducing vulnerability, which can hinder progress in reducing vulnerability over time. Furthermore, a lack of understanding of the most effective strategies for reducing vulnerability can lead to ineffective and inefficient use of resources. It is valuable for humanitarian organisations to have a comprehensive understanding of disaster theory in order to effectively reduce vulnerability among displaced populations. This can involve ongoing research and analysis of the underlying causes of vulnerability, the factors that contribute to displacement, and the most effective strategies for reducing vulnerability. This would enhance the integration of a long-term perspective to address underlying causes of vulnerability in order to have sustainable impact.

6.3   Discussion on Livelihoods and Access to Resources Activities

For people to lead dignified lives and support their families and communities, they need stable and productive livelihoods. This can be achieved by ensuring access to resources and locations without causing harm to others or future generations. A focus on livelihoods and resources is an essential foundation for disaster risk reduction (DRR). This means that by increasing productivity and access to resources, individuals and communities will have the surplus time and money to invest in DRR as a precautionary measure for the future. By making DRR practices and investments a routine and integrated part of daily life and livelihoods, it can strengthen people's ability to meet their daily needs while protecting them from the harmful effects of natural hazards, thus merging DRR and development together. Land tenure is another crucial factor that is often overlooked, and can negatively impact vulnerability to disasters. Insecurity in land tenure can lead to loss of land, particularly in cases where

alternative livelihoods and housing options are limited, with disasters serving as a catalyst for such loss. In a study by Reale and Handmer (2011), they identify five mediating factors about the security of land tenure: the local legal system, government administrative authority, economy, evidence of tenure, and custom and dominant social attitudes. These factors have varying levels of influence on different types of land tenure. The research emphasises the importance of land tenure in evaluating vulnerability. Security of land tenure is completely absent from the crisis in Cox's Bazar. Although not unusual to have weakened land tenure security in refugee crises, it is still possible to improve a sense of security through clear communication and defined long-term planning.

One key aspect of humanitarian projects for displaced people is the incorporation of social considerations in project design. This can involve working with communities to identify and address their specific needs and priorities, and involving them in the planning, implementation, and evaluation of projects. By engaging with communities and involving them in decision-making, these projects can ensure that they are addressing the most pressing needs and priorities of the population and can increase the likelihood of successful outcomes. Community participation and engagement are crucial for the success of disaster vulnerability reducing activities, as they lead to more effective and sustainable outcomes. This type of engagement enables the identification of local priorities, resources, and capacities, which are essential for the design, implementation, and evaluation of disaster vulnerability interventions. When communities are actively involved in the design and implementation of DRR interventions, they are more likely to take ownership of the project, leading to improved long-term feasibility of project activities. Engaging communities in the decision-making process ensures that the project is tailored to the needs of the community, rather than imposing external solutions. This can lead to more effective and sustainable outcomes as the

community is more likely to adopt and maintain the project over time as they have buy-in for the process. It is important to note that disaster vulnerability is not only considered a shelter issue but should be integral in all activities that aim to improve the lives and well-being of displaced communities. Disaster vulnerability should be considered in all sectors of development, such as health, education, agriculture, livelihoods, housing, and infrastructure. A comprehensive approach ensures the betterment of the community, improves the resilience of the people, and reduces the risk to future hazards.

This has been shown in previous studies with temporary housing programmes specifically lacking cultural adequacy. They highlight that temporary housing programmes often prioritise rapid construction, low cost, and lightweight technologies, but neglect the indoor environment and socio-cultural needs of the beneficiary communities (Sukhwani et al., 2021). As a result, these programmes are often criticised for being unsafe, psychologically traumatising, and inadequate for the needs of displaced communities. The immediate provision of temporary housing in the post-disaster period is complicated, but lessons can be learned from best practices that have considered cultural adequacy. These include the use of localised housing recovery, which promotes the use of local resources and climate considerations, and the use of incremental methodology, which emphasises the connection between temporary and permanent housing and local capacities (Sukhwani et al., 2021).

Incorporating social considerations in project design, such as community participation and engagement, is beneficial in ensuring that humanitarian projects for displaced people effectively address the specific needs and priorities of the population and increase the likelihood of successful outcomes. It is also valuable to understand that disaster risk reduction

is not just an issue concerning durable shelter but should be considered in all activities that aim to improve the lives and well-being of displaced communities.

Another key aspect of humanitarian projects for displaced people is the inclusion of education programmes that are designed for long-term outcomes. This was generally noted as absent in the interviews. Education programmes are crucial in order to build the resilience of the community and empower them to take control of their lives. An important aspect of education programmes for displaced people is that they should be conducted in the local language. Providing education in a language that is understood by the surrounding community is crucial for the effectiveness of the program. It allows for better integration and more effective learning, which in turn leads to better outcomes. Additionally, it is also important for education programmes to focus on realistic job opportunities in the region where the displaced population is located. This can increase the chances of employment and income generation for the community, which in turn improves their livelihoods and reduces their vulnerability.

Education on risk reduction, livelihoods, and access to resources is also a crucial aspect of these programmes. These education programmes can empower displaced people to better understand and manage the risks they face and build resilience for the long term. Education equips them with the knowledge and skills to reduce their vulnerability and improve their capacity to cope with hazards. Capacity building activities, such as education and training, are key in empowering communities to take control of their lives and make informed decisions to reduce their vulnerability. Capacity building activities can lead to increased community participation, improved understanding of risks and disaster management, and increased community resilience.

These programmes can empower displaced people to better understand and manage the risks they face and build resilience for the long-term by providing education in the local language, focusing on realistic job opportunities in the region, educating about risk reduction, livelihoods, and access to resources, and building the capacities of the communities.

Promoting human rights to adequate shelter is an essential aspect of humanitarian projects. Adequate shelter is a fundamental human need, and it is crucial for the wellbeing of displaced communities. It is also key to reducing the risk of displacement and displacement-related risks. Providing secure and safe housing and infrastructure can protect displaced people from the negative impacts of displacement and reduce displacement-related risks, such as physical and mental health problems. One aspect of promoting human rights to adequate shelter is addressing issues such as land tenure and housing rights. Land tenure rights determine the legal status of land and who has the right to use it, and housing rights refer to the rights of individuals and families to adequate housing. Ensuring the legal security of land and housing can lead to sustainable and resilient housing solutions, which can support long-term recovery and reconstruction. Additionally, working with communities to identify and address these issues can lead to more effective solutions that are tailored to the specific needs of the population. The participation of communities in identifying housing rights issues contributes to the success of the project as it ensures that the solutions are adapted to the reality of the community.

In a paper by Johnson et al. (2019), the author of this thesis, it is argued that the lack of adequate housing puts residents at risk for structural hazards, disease vectors, harassment, and extreme weather. Additionally, psychological harm can result from culturally inappropriate housing or living situations that compromise the dignity of occupants. The

article notes that determining what is considered 'adequate shelter' is difficult, as different guidelines such as the Sphere Handbook have varying standards, including minimum surface area, access to safe drinking water, and protection from structural hazards and extreme weather. Achieving these standards is difficult in the context of Cox's Bazar, due to a lack of suitable land, availability of material and labour, government restrictions, and lack of funding. Organisations working in the area have had to consider redefining "adequate shelter" to meet the desperate need for housing. The problems run deeper than just meeting minimum standards, as forcibly displaced populations suffer psychological injury and may make short-sighted decisions about their housing. Adequate shelter should be considered a sacrosanct human right, and redefining adequacy undermines this right. The lack of adequate shelter is ultimately about spiralling global inequality and is an ethical and moral dilemma for society as a whole. The lack of adequate shelter is not just a problem for refugees, but also for local residents in the Cox's Bazar region and many communities hosting displaced people, and addressing this issue is the responsibility of all.

6.4 Discussion on the External Influences on Project Design to Reduce Disaster Vulnerability

Instead of viewing refugee camps as simply a temporary solution, the idea of resource sharing and sustainable, long-term thinking needs to be adopted. These camps often become long-term settlements, with many people occupying refugee camps for several years. Due to this, a standardised, one-size-fits-all approach to camp design is ineffective and can lead to cultural and situational disparities. Despite this understanding in the literature, and a willingness from humanitarian organisations, there are many external influences preventing approaches

following this trend. Some positive approaches which are underutilised include a proposed alternative approach that includes designing areas with ample space for gardening, providing larger communal spaces for interactions between families, and creating durable housing solutions that can adapt to the changing needs of residents (Jahre, 2018) . In addition, another suggestion involves repurposing camps as enterprise zones, allowing residents to establish their own businesses and develop the necessary skills for returning to their homelands (Gibson, 2016). By taking a more holistic, long-term approach to camp design, it is possible to create sustainable communities that benefit both refugees and host populations. This would better align with global trends, as we are seeing many camps becoming long-term settlements, such as in the Somali camp in Dadaab, the Palestinian camp in Lebanon, and the Sahrawi camp in Algeria.

Government influence can be a significant obstacle for humanitarian organisations in their efforts to reduce disaster vulnerability among displaced people. Government policies and regulations can restrict the access of humanitarian organisations to vulnerable populations and limit their ability to provide them with the necessary support. This can be seen in situations where governments restrict the movement of humanitarian organisations within their borders or limit the types of activities that they are permitted to carry out. In addition to access restrictions, governments may also have competing priorities and agendas that take precedence over addressing the needs of displaced people. This can include focusing on political or economic objectives or prioritising domestic concerns over the needs of displaced populations. This can lead to a lack of coordination and cooperation between humanitarian organisations and the government, which can further hinder efforts to reduce disaster vulnerability among displaced people.

Another way government influence can impede humanitarian organisations is through a lack of transparency and accountability, whereby the government may not provide the necessary information to humanitarian organisations or may not allow them to report on the situation in the country, and this can make it difficult for humanitarian organisations to understand the needs of displaced people and to develop effective response strategies. In addition, governments may not be held accountable for their actions, which can lead to human rights abuses and violations of international humanitarian law. Furthermore, government influence can also be seen in the limited resources and funding allocated to humanitarian organisations working in the field. Governments may prioritise other sectors over humanitarian aid and may not provide the necessary funding to support the work of these organisations. This can limit the ability of humanitarian organisations to provide essential services and to respond effectively to the needs of displaced people.

Donor influence on humanitarian organisations can lead to a lack of flexibility and a focus on short-term solutions. Donors may only be willing to fund certain types of interventions or activities that align with their priorities, which may not necessarily be the most effective in reducing disaster vulnerability among displaced people. As a result, organisations may not be able to implement programmes that are tailored to the specific needs of the displaced population they are serving, which can hinder their ability to reduce disaster vulnerability. Furthermore, donors might have their own specific conditionality for funding and a short-term perspective for their funding which can lead to a lack of continuity of the programmes, leaving the affected population in a continuous state of vulnerability. Thus, humanitarian organisations need to be more accountable to affected populations, rather than to donors.

In addition to the potential for conflicting priorities, donor influence can also lead to a lack of focus on long-term, sustainable solutions. As funding for humanitarian organisations often comes from a variety of sources, organisations may feel pressure to align their programmes with donor priorities in order to secure funding. This can lead to a focus on short-term, quick-impact projects that may have less of an impact on reducing disaster vulnerability in the long-term. Moreover, donors may also impose conditions on funding that may not be in line with the reality on the ground. This can lead to a lack of flexibility in programme implementation and a lack of ability to adapt to the specific needs and context of the displacement situation. This can make the programmes less effective in reducing disaster vulnerability among displaced people. Additionally, the political agendas of some international actors may also shape the humanitarian response, as they can use aid as a tool of foreign policy. This can lead to priorities shifting from addressing the needs of the affected people to geopolitical objectives, leading to less effective humanitarian actions. Aid can be counterproductive when it is delivered in a context of weak governance and conflict. While donor funding is essential for the functioning of humanitarian organisations, it is important for organisations to maintain their independence and flexibility in order to effectively address the needs of displaced people and reduce disaster vulnerability.

The prioritisation of certain crises over others based on political considerations can result in an unequal distribution of aid resources and a lack of funding for certain crises. Additionally, political tensions and conflicts can make it difficult for humanitarian organisations to access affected areas and can also limit the types of interventions and activities that organisations can carry out. Political interests, rather than needs, continue to drive humanitarian responses. This can have a detrimental effect on the ability of organisations to provide adequate support and assistance to affected populations. This can be exacerbated if the political considerations

are such that aid is not provided based on need but to achieve certain political goals. This was observed in many cases where aid was provided selectively to certain groups, creating further vulnerabilities and inequalities among the displaced (Aldrich, 2010).

6.5   Discussion on the Organisational and Coordination Issues Affecting Programme Outcomes

Coordination issues within the humanitarian sector can take many forms and can have a significant impact on the ability of organisations to effectively address the needs of vulnerable populations. One common issue is the lack of coordination between different organisations working in the same area. This can lead to inefficiencies and duplicated efforts, as well as a lack of consistency in the services and support provided to affected communities. Another issue is the lack of coordination between humanitarian organisations and government agencies. This can occur when governments have competing priorities or agendas that take precedence over addressing the needs of displaced populations, leading to a lack of cooperation and coordination between the two. Furthermore, there can be coordination issues between different sectors, such as health and education, leading to a lack of integration and coherence in the services provided to affected communities. These coordination issues can be further exacerbated by a lack of communication and information sharing among organisations, which can lead to a lack of understanding of the needs and priorities of affected communities. These coordination issues can also be related to the lack of resources, staff, and capacity of humanitarian organisations to effectively respond to disasters and crisis. Competition between aid organisations over resources has been shown in the data and also reflected in literature looking at other crises (Chang et al., 2011). This lack of coordination can

also happen between national and local governments, or between different departments or agencies within the same government. This can lead to gaps in service delivery and can result in a lack of accountability for the provision of services.

Some solutions work well within a siloed approach, such as short-term technical solutions to disaster risk reduction that tend to work reasonably well in isolation. This makes them a favourable solution for many politicians and businesses, as they do not disrupt the status quo. For example, in the project funded by The Royal Society to build more resilient futures by decreasing the risk of hydro-meteorological disasters and landslides, the output of this project was the creation of a dynamic early warning system for landslides using geospatial technologies specifically tailored for the Rohingya refugee community (Ahmed et al., 2020). The cluster approach is a widely used coordination mechanism within the humanitarian community. The approach aims to divide responsibilities among different organisations for specific sectors, such as health or shelter. However, despite its benefits, the approach also has limitations. One of the main criticisms of the cluster approach is that it can lead to a lack of local ownership. This is because decision-making and coordination are often centralised among the cluster leads, rather than involving local organisations and communities (Sanderson, 2019). This centralisation of decision-making can result in a disconnect between the interventions being implemented and the actual needs of the affected population, which can hinder the effectiveness of the response and reduce the overall impact on reducing disaster vulnerability among displaced people. In order to strengthen the response and increase the effectiveness, it is crucial to involve local organisations and the community in the decision-making and coordination process, as they often have the most knowledge of the context and the needs of the population. Another limitation is lack of accountability and coordination among organisations which can result in overlaps and gaps in services and may

be ineffective in addressing the vulnerability of the displaced population. Thus, NGOs may not be able to effectively address disaster vulnerability among displaced people due to the limitations of the cluster approach in terms of lack of local ownership, coordination, and accountability. This lack of coordination and cooperation can take many forms and can have a detrimental effect on the response to a crisis.

Another issue involves monitoring and evaluation difficulties. It can be challenging for organisations to measure the impact of their interventions and identify areas for improvement. Without proper monitoring and evaluation, organisations may continue to implement ineffective interventions, resulting in wasted resources and limited progress in reducing disaster vulnerability among displaced people. This can be due to a lack of clear standards and metrics for evaluating the effectiveness of interventions, as well as a lack of capacity and resources within organisations to conduct monitoring and evaluations (İbrahim & Şah, 2022). Additionally, the fast-paced and ever-changing nature of displacement crises can make it difficult to establish a clear before-and-after baseline for measuring progress. Without proper monitoring and evaluation, it is difficult to adjust and adapt interventions based on the changing needs of the affected population. This can impede the ability of humanitarian organisations to effectively reduce disaster vulnerability among displaced people. Monitoring and evaluation difficulties can arise from a variety of factors, such as lack of data and information from local partners, lack of standardisation in data collection and analysis, limited capacity of organisations to conduct evaluations, and lack of funds to invest in evaluation activities. These difficulties can make it challenging for organisations to effectively measure the impact of their interventions, to identify the strengths and weaknesses of their approaches and adjust accordingly, leading to limited progress in reducing disaster vulnerability among displaced people. Without proper monitoring and

evaluation, interventions may continue to be implemented without adequate evidence of their effectiveness, resulting in wasted resources and limited positive impact on the ground. Thus, it would be beneficial for organisations to invest in monitoring and evaluation activities to improve their ability to reduce disaster vulnerability among displaced people. Furthermore, without the requirement from funding bodies to report on long-term indicators, the onus is placed on the organisations to self-impose outcome-level monitoring. With limited time and resources, it was found that this becomes a lower priority.

Lesson sharing is another hurdle in the humanitarian sector. It is essential for organisations to learn from each other's experiences in order to improve their responses and better meet the needs of affected populations. However, organisations may be hesitant to share information and best practices due to concerns about competition and confidentiality. This can lead to a lack of collective learning among the humanitarian community, resulting in the duplication of efforts, inefficiencies, and missed opportunities to improve the response and reduce disaster vulnerability among displaced people. When a culture of sharing and learning is not fostered within the humanitarian community, it can perpetuate a cycle of poor performance and ineffective interventions. Lesson sharing is further attenuated by the high staff turnover within the humanitarian sector. The issues of staff retention that emerged in the interview data are also reflected in other studies. In a study by Breman et al., (2019), it was found that training and capacity building led to a greater retention of staff.

High staff turnover rates can impact the continuity and sustainability of the interventions and can also create a lack of institutional memory for the organisations and difficulty in maintaining the momentum of the projects and fostering relationships with key stakeholders. The high turnover rate of staff in humanitarian organisations can hinder the ability for these

organisations to effectively reduce disaster vulnerability among displaced people. The constant influx of new staff members can lead to a lack of institutional knowledge and experience, which can impede the ability of organisations to effectively respond to crises and make informed decisions. This is problematic, as humanitarian work is a learning and knowledge-intensive endeavour, and organisations need to be able to build on their previous experiences in order to effectively and efficiently respond to ongoing and new crises (Scott, 2014). This high staff turnover can also create difficulties in terms of the employees' ability to understand the local context, communities, and the humanitarian systems, which can be detrimental for the continuity of activities. High rates of staff turnover can also create a lack of continuity and consistency in the response, hindering progress towards reducing disaster vulnerability among displaced people. This lack of continuity can also be caused when front-line responders and managers leave the organisation. Previous studies have highlighted the importance of fostering a culture of sharing and learning within the humanitarian community in order to overcome these coordination issues (Ontko et al., 2007).

6.6   Discussion on the Social Cohesion and Equity Issues Not Sufficiently Addressed by the Humanitarian Sector

The capacity of refugees to cope with displacement varies greatly; some may have greater resources and support networks such as savings or family ties in the host country, others may not. Populations that remain in their communities of origin can also be vulnerable. Voluntary returnees may have advantages such as skills and capital acquired abroad, while refugees and IDPs may face similar challenges as rural-to-urban migrants or the urban or rural poor population. These variations can lead to tension and conflict between communities and may

cause secondary displacement on a large scale. To effectively address the needs of all affected communities, a comprehensive, nuanced, and flexible approach is needed, one that takes into account these various factors and their complexity.

Putting too much emphasis on the legal status of refugees can go against the fundamental principle of aid being distributed based on needs alone. Attempting to categorise people based on legal status can also be a challenge in situations where the reasons for displacement are multifaceted and vulnerability is determined more by an individual's circumstances rather than their group membership. As such, it is essential to prioritise actual vulnerabilities over legal status when designing interventions while still adhering to international and human rights laws. The protection needs of those who have been forcibly displaced must be taken into account, considering factors such as gender, age, disability, political beliefs, ethnicity, language, caste, religion, and sexual orientation. A one-size-fits-all approach simply will not work in this scenario.

The lack of localisation has been mentioned throughout the interviews, and further supported through the 4W data (who, what, when, where) from the responses. In a study by Chowdhury et al. (2022), they examine the layout and development of these humanitarian operations with the goal of determining the level of local involvement, specifically the involvement of Bangladeshi actors in managing the camps during the early stages of the crisis. The research used a quantitative method by analysing the 4W data from UNOCHA. It was found that humanitarian operations were dominated by international actors and that local involvement was limited during the early stages of the crisis, based on the segregation of humanitarian operators by national and international non-governmental organisations and a network analysis.

The lack of localisation of the labour force within NGOs can result in a number of negative impacts on the ability of humanitarian organisations to effectively address the needs of displaced populations and host communities. Having a majority of staff composed of expatriates within humanitarian organisations can lead to a lack of understanding of the cultural and social context of the communities they are trying to serve, which can result in aid interventions that do not effectively address the specific needs of those communities. One key issue stemming from this is the lack of local ownership, as decisions are often centralised among expatriate staff instead of involving local organisations and communities. This can lead to a disconnect between the interventions being implemented and the actual needs of the affected population, which can ultimately result in a lack of buy-in and sustainability of the aid efforts (Chowdhury et al., 2022).

Additionally, the presence of a large number of expatriate staff can put a strain on local resources, as they are often provided with housing, transportation, and other resources that may not be available to local communities. This can lead to tensions between the expatriate staff and local communities and result in a lack of cooperation and coordination between the humanitarian organisations and the local communities they aim to serve. Furthermore, aid delivery can also be unequal when a lack of localisation in the labour force is present, as the aid is not as well-suited to the specific needs of the communities and can often not be integrated into local systems, which may result in unequal aid delivered to refugees over the host community and a long-term dependency on aid rather than integration and self-sufficiency. Furthermore, a lack of integration and coordination between humanitarian organisations, host communities, and local governments can also result in a lack of integration and sustainability of aid efforts. Without proper coordination, aid interventions may not be

aligned with the needs and priorities of the host communities, leading to further tension and resentment.

Another issue related to social cohesion and aid equity is the strain that forced displacement can put on local resources. As displaced populations arrive in host communities, they may rely on scarce resources such as housing, food, and medical care. This increased demand can put pressure on already stretched resources and lead to competition for access to these resources between the displaced population and host community. This can lead to tension and bitterness between the two groups and may exacerbate pre-existing conflicts or inequalities. This increased competition for resources can also lead to a further exacerbation of vulnerability among both the displaced population and host community. For the displaced population, limited access to resources can make it difficult for them to meet their basic needs, leading to increased poverty and hardship. This can also lead to a lack of access to essential services such as healthcare and education, further worsening the vulnerabilities that they may already be facing. For the host community, the increased demand for resources can lead to a strain on their own resources, leading to a decline in their standard of living and an increase in their own vulnerability. Additionally, the tension and bitterness between the two groups can lead to a breakdown in social cohesion, which can undermine the ability of the community to respond effectively to a disaster.

The issue of inequitable aid delivery can have significant negative impacts on both the displaced population and host communities. When aid is perceived as being distributed unfairly, it can lead to feelings of injustice and frustration among both the displaced and host populations. This is particularly true when refugees have access to better services or resources than the host community. This can create perceptions of favouritism and can lead

to social tension and resentment. These feelings of injustice can be exacerbated when the aid is distributed based on legal status, rather than needs. This was echoed throughout the interviews where respondents often stated that they noticed growing resentment within the host community. Services were often open to the host community; however, they are not broadly publicised and host community involvement is low. One way to mitigate these issues is for humanitarian organisations to strive for a sense of fairness, equity, and inclusivity in the provision of aid and services. This can be achieved by involving both the displaced population and host communities in the design, implementation, and monitoring of aid interventions. By ensuring that the perspectives of both groups are taken into account, it is more likely that the aid will be perceived as being equitable and will be accepted and sustained in the long term.

6.7   Propositions from the Literature Revisited

As this study uses abductive reasoning, the findings from the interviews are used to contextualise and revise the propositions made from the literature review. The following section restates the propositions from the literature review with comments based on this chapter.

Proposition 1 – *Humanitarian projects for displaced populations tend to focus primarily on addressing unsafe conditions and mitigating hazards, whilst root causes and dynamic pressures are either a lower priority, or too difficult to address in the political climate.*

This proposition was reflected in this context, with multiple participants expressing that in this stage of the response there is a much larger focus on addressing unsafe conditions. The crisis highlights the limitations of a narrow focus on addressing immediate safety concerns for displaced populations. While the humanitarian sector is primarily concerned with

providing food, shelter, and medical care to those who have been forcibly displaced, the root causes of vulnerability are often left unaddressed, making it difficult for them to access the resources and support networks needed for recovery. It is necessary to take a comprehensive approach that not only addresses immediate safety concerns but also addresses the root causes and dynamic pressures. This requires the humanitarian sector to work closely with political actors and engage in advocacy efforts to address the broader context of the crisis and promote long-term solutions. One additional aspect to this issue that was not apparent in the initial proposition was a lack of understanding among humanitarian actors of the root causes of disaster vulnerability. In many cases, participants would only view disaster risk as a concern for shelter, camp planning, and early warning, without considering the broader drivers of risk.

Proposition 2 – The forced displacement context generally does not allow humanitarian actors to address root causes and dynamic pressures. Alternative indicators for success are necessary in the context of forced displacement.

This proposition was found to be true in this context, and there were many aspects of dynamic pressures and root causes that were unable to be addressed. From the interviews, no alternative indicators for success were being used. In general, there was a focus on short-term indicators and some aspects were not measured at all. Alternative indicators for progress in this area could include activities relating to advocacy to ensure the most effective projects are allowed. This would demonstrate a willingness from the humanitarian sector to shift from short-term mitigation measures to activities that address root causes and dynamic pressures. Monitoring the progress of alternative indicators can help provide a clearer picture of the humanitarian impact of interventions in forced displacement contexts.

Proposition 3 – Social capital is negatively affected following forced displacement, increasing vulnerability. Bonding social capital can remain strong and be fostered through humanitarian work, however, there is difficulty in building both linking and bridging social capital.

In the context of the Rohingya refugee crisis, the displacement of individuals from their homes can have a large impact on their social capital. Bonding social capital, which refers to relationships and connections within a particular group, appeared to remain strong and even be strengthened through humanitarian interventions. However, building both linking and bridging social capital, which involves connections across different groups and communities, was more challenging. This is due to the strained relationships that can develop between displaced populations and host communities, as the increased demand for resources such as housing, food, and medical care puts pressure on already stretched resources. This led to competition and tension between the two groups and exacerbated pre-existing conflicts or inequalities. As a result, the displacement of individuals has shown it can increase their vulnerability and limit their ability to build connections and relationships that are essential for recovery and resilience. Additionally, there was mistrust between the refugees and humanitarian organisations, creating additionally difficulties in addressing linking and bridging social capital.

Proposition 4 – Self-protection (income and resources used to protect against known hazards) is significantly reduced following forced displacement. Household assessment of risk is low, with many non-hazard priorities present, and spending and resource availability is reduced following displacement.

This case study highlights the impact that forced displacement can have on the self-protection capabilities of affected individuals. Displacement can result in a significant reduction of

household income and resources, which in turn limits people's ability to protect themselves against known hazards. In the context of the Rohingya refugee crisis, many households face multiple non-hazard priorities, such as obtaining food, shelter, and medical care, which compete with their ability to protect themselves from hazards. This highlights the importance of addressing the self-protection capabilities of displaced populations as part of any humanitarian response. The humanitarian sector could address this through providing targeted support for livelihood and income generation programmes for displaced individuals and families, which can help them rebuild their resources and better protect themselves from known hazards. The sector could also explore alternative approaches, such as community-based risk assessments and early warning systems, to help displaced populations better understand and prepare for potential hazards, even in the context of limited resources.

Proposition 5 – *All components of vulnerability from Cannon's model are adversely affected following forced displacement and the key connections/disconnects compound this impact.*

The impacts seen in this crisis have shown that all the components of vulnerability as outlined by Cannon's 'five components of vulnerability' model were affected. Displacement has negatively impacted the resources, capacities, access, and social relations of individuals, intensifying their already vulnerable state. As a result, the key connections within the model are disrupted, compounding the impact of displacement on the refugees. In light of this, the humanitarian sector could prioritise its efforts to address the disconnects within the model in order to reduce the vulnerability of the Rohingya refugees. For example, the key disconnect between self-protection (income and resources used to protect against known hazards) and livelihoods (strength and resilience) is the household assessment of risk depending on culture and non-hazard priorities. By targeting activities to address this disconnect, it is possible to

influence vulnerability through both components. These should be the priority of humanitarian operations in reducing vulnerability.

***Proposition 6** – Low levels of institutional knowledge due to high turnover in the humanitarian sector negatively affects organisations' ability to improve vulnerability reducing activities.*

In the context of the Rohingya refugee crisis, it was shown that the high turnover of personnel within the humanitarian sector can lead to a lack of institutional knowledge. This means that there is a limited understanding of the historical context of the crisis, the dynamics of the situation, and the most effective ways to address the needs of the affected population. As a result, there is limited capacity to improve humanitarian practices over time and respond effectively to the evolving needs of the displaced population. This can result in a lack of accountability, inefficiencies in aid delivery, and a failure to address the root causes of vulnerability. To mitigate this issue, it is important for the humanitarian sector to prioritise efforts to build and maintain institutional knowledge, including through the use of long-term field staff and the systematic documentation and sharing of information and best practices.

***Proposition 7** – Donors can negatively influence organisations' ability to reduce the disaster vulnerability of displaced people in the long-term.*

One challenge faced by the humanitarian sector in the context of the Rohingya refugee crisis is the influence of donors on the ability of organisations to reduce disaster vulnerability. Donors can dictate the priorities and focus of humanitarian projects, and do not always fully understand the complexities of the situation on the ground. At times this has led to a focus on short-term, symptomatic interventions that do not address the root causes of disaster vulnerability and may even exacerbate the situation in the long-term. For example, donors may prioritise funding for shelter and food assistance, while ignoring the need to support the

development of local economies and improve access to essential services like healthcare and education. This can limit the capacity of organisations to tackle the root causes of disaster vulnerability and support sustainable recovery for the displaced population. To address this challenge, the humanitarian sector could prioritise transparency and collaboration with local organisations, communities, and displaced populations to ensure that interventions are driven by their needs and perspectives. Additionally, efforts could be made to engage with donors and educate them on the complexities of the situation and the importance of a long-term, comprehensive approach to reducing disaster vulnerability.

Proposition 8 – *Government restrictions and international political agendas affect organisations' ability to reduce the disaster vulnerability of displaced people in the long term.*

In the context of the Rohingya refugee crisis, government restrictions and political agendas were shown to significantly impact the ability of humanitarian organisations to effectively reduce the disaster vulnerability of displaced people. These restrictions and agendas at times limit the access of organisations to certain areas and communities (such as in the case of specific organisations accessing Bhasan Char), restrict the type of aid that can be provided, and limit the ability of organisations to engage in advocacy and protection work. This can result in the lack of a response that is tailored to the specific needs and vulnerabilities of the displaced population and may limit the ability of organisations to respond to the root causes and dynamic pressures of the crisis. This can ultimately lead to a situation where displaced people are unable to access the resources and support they need to recover and build resilience, leaving them vulnerable to known hazards.

6.8   Recommendations From the Discussion

It is evident from the findings of this study that the approach to reducing disaster vulnerability is lacking in several key areas. To effectively address the needs of displaced individuals and host communities, a comprehensive and collaborative policy framework must be established. This framework should integrate political, human rights, humanitarian, and development approaches to create a mutually beneficial situation for both parties. It should aim to tap into the productive capabilities of refugees and internally displaced persons by providing them with access to education, housing, land, and livelihoods and by fostering interaction between them and their host communities. To make these policies successful, existing barriers between different sectors need to be overcome, which means political actors need to more actively engage in negotiations to remove obstacles to displaced people's potential development. Humanitarian and development actors often work within different structural, programming, and funding cycles that do not align with the long-term needs of displaced people or host communities. Humanitarian assistance aims to address the immediate needs of displaced people in the early stages of crisis, while development assistance operates under long-term planning cycles. With stronger collaboration between these two sectors, in terms of funding, information exchange, and goal setting, more effective and sustainable protection and self-reliance strategies can be created that will benefit both displaced people and host communities.

There is an opportunity for greater integration of these stages. A development-focused approach to forced displacement not only avoids additional costs, but it also increases efficiency and improves outcomes for both donors and beneficiaries in the medium to long-term by reducing dependency on humanitarian aid and optimising the impact of development

investments. The participation of host governments is vital as they are accountable for creating the legal and policy frameworks that address the needs of refugees, internally displaced persons, and host communities. They determine the parameters for development interventions and the timing and scope for humanitarian interventions. Many host states are not equipped to handle these challenges on their own and thus significant international investments, particularly at the local level, are necessary to achieve positive outcomes over the long term and promote fair burden-sharing. These investments should eliminate discrimination among different groups of forcibly displaced people, remove barriers to labour market participation, and enhance access to social services, upgrade settlements and secure long-term legal status for refugees and internally displaced persons. This section presents a new, development-oriented approach for forced displacement, comprising a series of recommendations that connect various instruments and actions to create an effective, comprehensive, and multi-actor approach to forced displacement (an integrated approach). It also seeks the support of implementing partners such as UN agencies, international organisations, NGOs, civil society organisations, the private sector, and other partner countries.

6.8.1 An integrated approach

The themes and propositions from this study suggest that an alternative approach to reducing disaster vulnerability is necessary. An integrated approach to displacement and development is seen as valuable as it has the ability to reduce the negative effects that refugees, internally displaced persons, and returnees may have on host countries and communities. This approach has the potential to maximise the positive impact of these individuals by utilising

them as potential development and economic contributors, whether they are residing in camps, urban areas, or rural settings (European Commission, 2015). Such an approach could utilise aspects from the new approach of designing refugee camps, as described by Kennedy (2008), where they view camps and their inhabitants as resources that can be shared with the host communities by positioning essential facilities like hospitals, schools and markets in areas that are accessible to all, instead of just the central location of the camp. This allows for a more efficient usage of resources like electricity, water, education, and health services. Gibson (2016) proposed rebranding refugee camps as enterprise zones, thus allowing for the development of businesses and self-sustaining infrastructure. This not only benefits both refugees and host communities but also equips inhabitants with valuable skills for their eventual return to their home countries. The approach requires a more inclusive, bottom-up approach to camp design, which must be seen as a fluid process and not a one-time design intervention.

6.8.2 Vulnerability Headway Model

The integrated approach could take myriad forms; however, the first step involves the acknowledgement of the need for the merging of stages in response and development to allow for simultaneous activities in both fields. This study proposes a model to reassess the allocation of resources and focus of activities to addressing the root causes of disaster vulnerability. By focusing efforts in this manner, earlier in the crisis, it is possible to avoid potential vulnerability traps emerging, whereby efforts to reduce vulnerability can have the opposite effect in the long-term. Taking inspiration from the Expand and Contract model for disaster risk reduction (DPLG, 1998), this study presents a new model to demonstrate the

changing focus of vulnerability reducing activities over time. The expand-contract model offers a different perspective on disaster risk reduction, recognising it as an ongoing process rather than sequential stages.
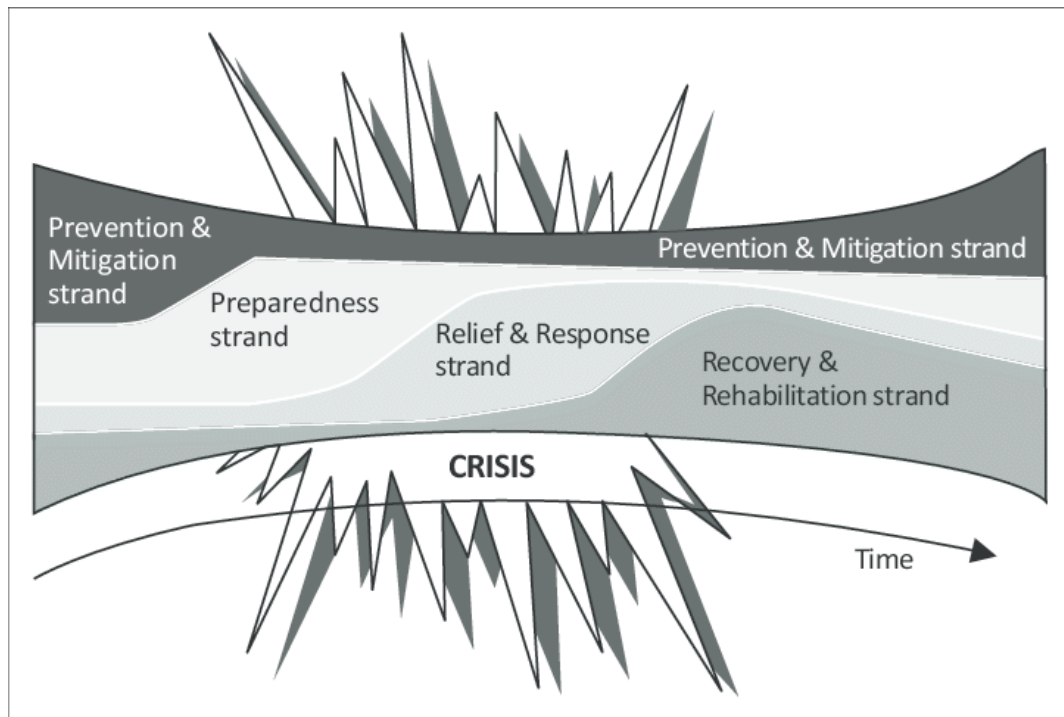
Figure 21: The Expand and Contract Model (DPLG, 1998)

This model separates the activities of disaster risk reduction into distinct, parallel stages, with each stage being expandable or contractable depending on temporal requirements. Instead of viewing disaster risk reduction as a one-time event, the expand-contract model posits that it is a dynamic process that adapts and evolves as needed (DPLG, 1998). In this approach, different strands of activities or actions, such as relief and response, recovery, and rehabilitation, occur in parallel, and expand or contract as necessary. For instance, immediately following a disaster event, such as a flood, the relief and response strand will expand to address the immediate effects of the disaster. However, as time passes, the recovery and rehabilitation strand, which includes activities to prevent future disasters, will expand to address the long-term needs of the affected community. The relative weighting of different strands will also vary depending on the relationship between the hazard event and

the vulnerability of the community. This approach recognises that disaster management typically encompasses a range of interventions and actions that may occur simultaneously and not always in a linear sequence.

Similarly, the unique model presented in this study shows the stages of addressing unsafe conditions, dynamic pressures, and root causes, as simultaneous activities with varying levels of focus and resources over the response duration.
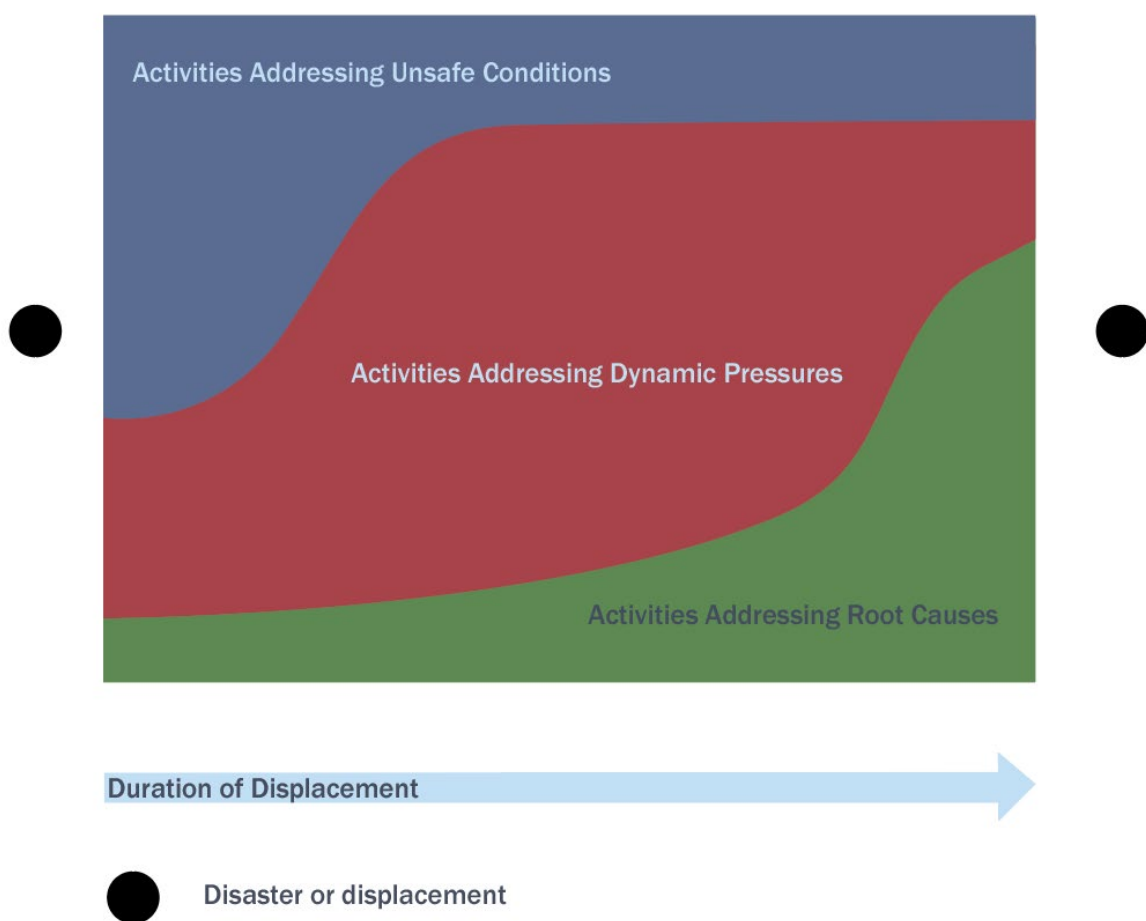
Figure 22: Focus of activities over duration of displacement. Author supplied

This diagram is modelled on the hypothetical best practice, however, the reality of resource allocation in refugee crises is often considerably different. Following displacement, there are immediate concerns relating to unsafe conditions that need to be prioritised with a majority

of the available resources. However, it should be noted that at every point in the response, the progression of vulnerability is being addressed. As demonstrated through several of the themes that emerged from the data, there are many barriers to implementing activities that are best placed to reduce vulnerability. There are external influences, government restrictions, political agendas, and organisational constraints that stifle these efforts. In some cases, this can result in a loop emerging, with subsequent disasters disrupting the model and the reallocation of resources failing to be realigned to match the duration of displacement. The loop prevents significant allocation of resources being allocated to the root causes of vulnerability which, when combined with periodical disruptions, can lead to a net increase in disaster vulnerability in the medium to long term. We refer to this net increase of vulnerability through misplaced humanitarian focus a 'fall-back loop'.

The phases in the model represent the amount of time between major disruptions. This could be triggered by a natural hazard, further displacement, or surges in conflict. These events have the effect of resetting the agendas of the humanitarian sector. Following a disruption, the efforts of the humanitarian sector again need to be refocused on addressing safe conditions, which prevents progress in reducing the root causes of vulnerability. If adequate resources are allocated to addressing root causes in between disruptions, it is possible that progress is maintained after the disruption, which leads to a net reduction in disaster vulnerability over time. This is demonstrated when we look at multiple cycles of the model as shown in figure 23. We call this version of the model the *Vulnerability Headway Model*.
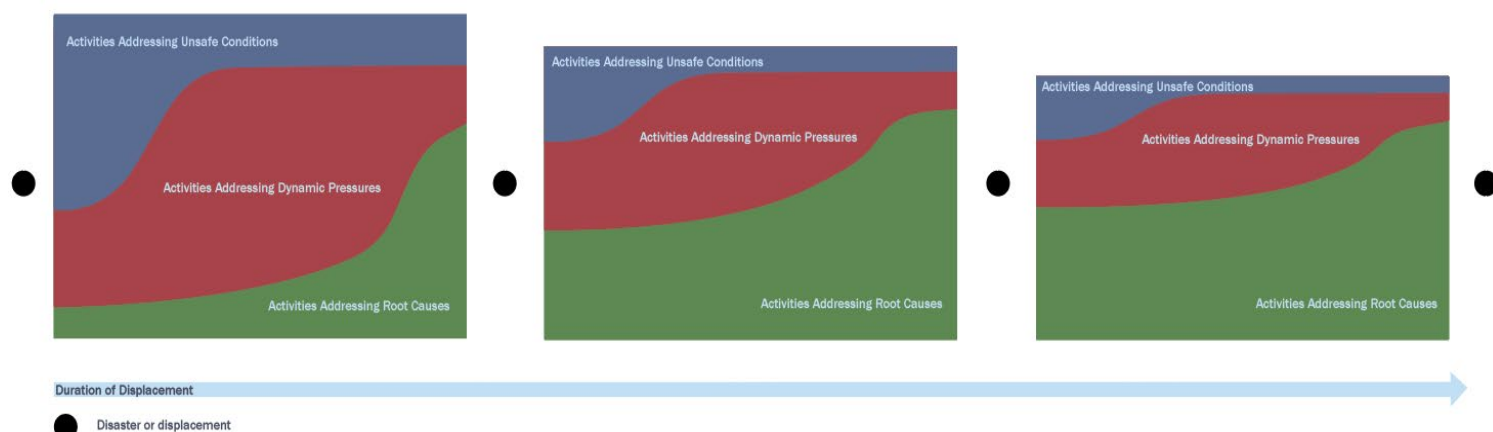
Figure 23: *The Vulnerability Headway Model. Author supplied*

As shown in the model, you can see that the disruptions do not cause enough damage to necessitate significant investment in addressing safe conditions again. Through addressing the root causes of vulnerability, the impacts of disruptions are lessened and over time conditions are improved. In contrast, figure 24 shows the net increase in vulnerability through disregarding the root causes of vulnerability in the displacement context. It is important to note that both the *Vulnerability Headway Model* and the *Vulnerability Fall-back Loop Model* show a notable reduction in overall funding over time (shown in the overall reduction on the y-axis). This is to reflect the experiences reported by humanitarian workers in this study, that funding tends to be at its highest in the first year and dwindles in subsequent years. This makes the correct allocation of funds and activities increasingly important as resources become scarcer.
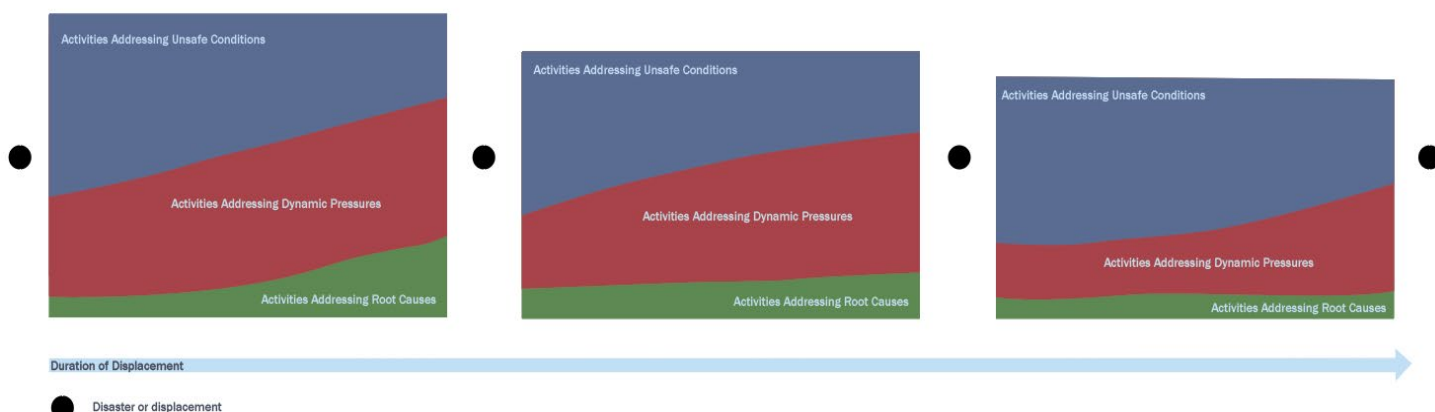
Figure 24: *Vulnerability Fall-back Loop Model. Author supplied*

The *Vulnerability Fall-back Loop Model* is a representation of the way in which many refugee crises are approached and demonstrates that even with aid and investment, without adequate focus of activities and resource allocation to root causes, the vulnerability of the displaced people will remain static or in some cases increase. This creates a vulnerability reduction paradox, where we are allocating resources to reduce disaster vulnerability, however, in the long-term, we may witness it increase.

6.8.3 Conceptual framework revisited

The Rohingya refugee crisis highlighted the complexity of reducing disaster vulnerability and the need for an alternative approach. By exploring the conceptual framework through the case study, we can determine which aspects accurately reflect the operations of the humanitarian sector and which aspects should be revised. It was found that the impacts of displacement affected the root causes and dynamic pressures of vulnerability as expected. The section on the right of the model that looks at the limitations of the humanitarian sector was expanded to reflect the challenges mentioned in the interviews. Activities that look to address the root causes of vulnerability were primarily hindered by government restrictions,

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political agendas, and other external influences, rather than the limitations of the organisations themselves, whereas the activities that address dynamic pressures were shown to be the most negatively affected by the funding allocation. Both of these aspects were also negatively affected by the difficulties faced in monitoring, evaluation, and learning (MEAL). Additionally, humanitarian coordination issues were shown to impact organisations' ability to address unsafe conditions, hence, this was added to the internal influences. The long-term indicators necessary for the assessment of effectiveness in these areas make it difficult to improve outcomes. Furthermore, changes to the model demonstrate that activities in the progression of safety should be more targeted. The model shows the specific targeting of these activities to address the key disconnects and connections in the components of vulnerability. This allows the humanitarian sector to maximise the efficiency of vulnerability reducing efforts. Specifically, activities relating to root causes should aim to address key disconnect 2 (household assessment of risk depending on culture and non-hazard priorities), key connection 3 (spending and resource availability), key disconnect 4 (bad governance leading to poor social protection), and key disconnect 5 (unequal income and asset distribution). Whereas activities relating to dynamic pressures should aim to address key dis/connect 1 (income and subsistence provision).

The findings from this case study highlight the need for a better understanding of the limitations of the humanitarian sector and the external influences that hinder its ability to reduce disaster vulnerability. It also highlights the need for a more comprehensive and nuanced approach to humanitarian response, taking into account the complex interplay of root causes and dynamic pressures and the various external factors that may impact their resolution.
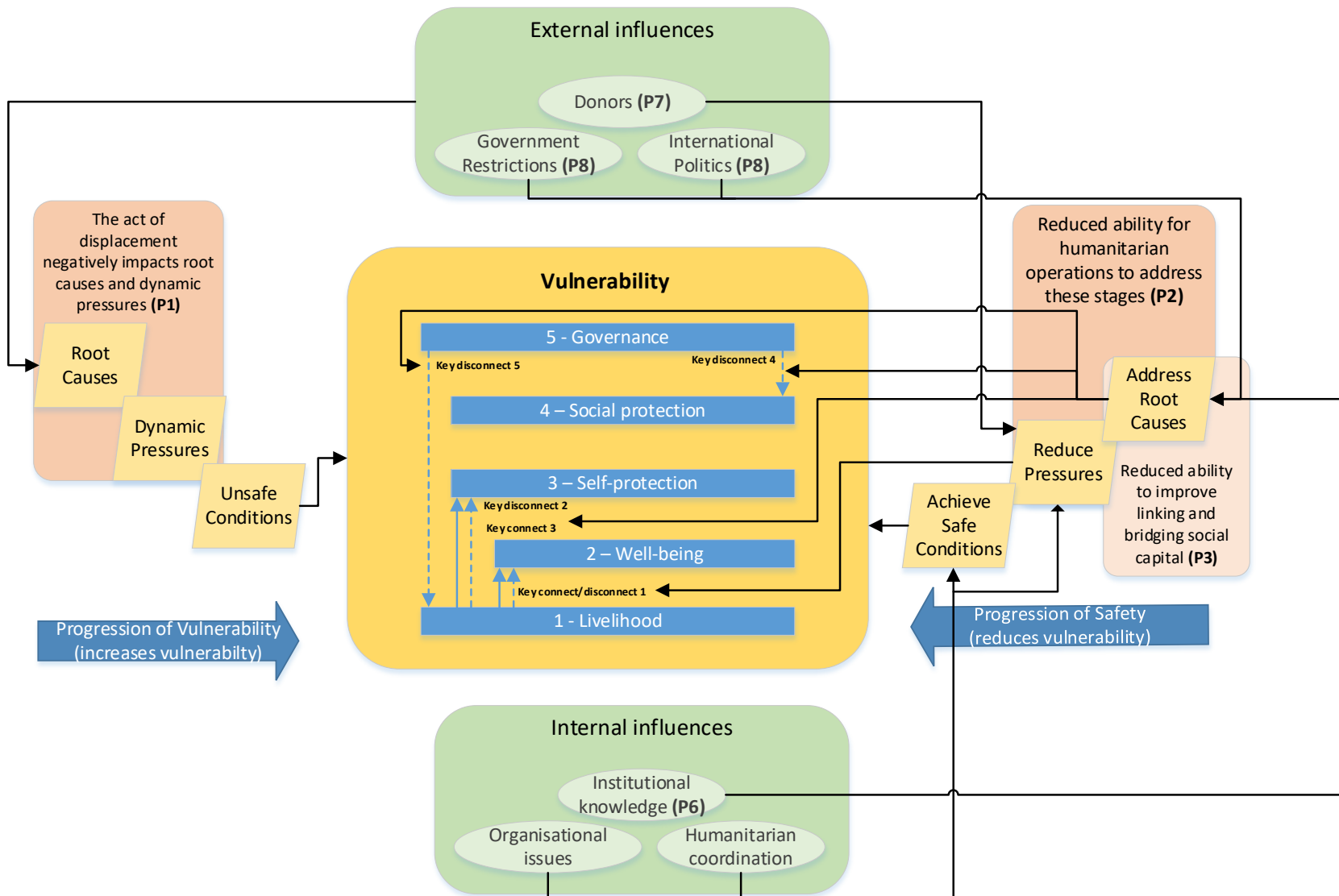
Figure 25: *Revised Conceptual Model*

6.9   Chapter Summary

This chapter has aimed to provide a deeper understanding of the five key themes that emerged from the results chapter, contextualised within the existing literature. The results chapter presented the findings of the data analysis, whilst this chapter has interpreted those results in the context of the literature and provided propositions for their implications on theory and practice. The chapter also revisited the propositions made in chapter two and revised them based on the themes that emerged from the interviews. Additionally, a new model was presented, showing the focus of activities in humanitarian responses, which helped to show how resources are allocated and how they impact the outcome of vulnerability reduction after multiple disruptions. The chapter concluded with a revised illustration of the conceptual framework, providing a comprehensive understanding of the research and its implications. The research in this thesis aimed to fill gaps in the existing literature by providing new insights into the key themes that emerged from the data. The chapter provided a detailed discussion of the implications of the findings for theory and practice and helped to identify areas for future research. Overall, this chapter has provided a thorough analysis of the research and its contributions to the field of disaster vulnerability and forced displacement.

Chapter Seven – Conclusion

7.1   Introduction

This chapter provides a summary of the study and outlines the findings. It also highlights the contribution to knowledge along with a discussion of the limitations of this study. The section calls for future research by proposing research questions to explore this field further. The chapter concludes with a section presenting 'a way forward', highlighting the importance of further research in this area, but also the continued efforts of other disciplines that influence the lives of displaced people around the world.

This study investigated a gap in knowledge in the discourse of disaster vulnerability in relation to humanitarian responses to displacement. The study extends to the long-term impacts of displacement on disaster vulnerability. Therefore, this research explored the effects of humanitarian operations on the disaster vulnerability of forcibly displaced populations. The research question that guided the study was, *"How do humanitarian operations impact the progression of disaster vulnerability of forcibly displaced populations?"*

The research question was answered by meeting the five objectives of the study addressed below and summarised in the *summary of the key findings* in this chapter.

1. *Develop a conceptual framework to explore the nexus of disaster vulnerability, and humanitarian operations in the context of forced displacement*

This objective was met in chapter two, which presented a conceptual framework based on the literature in the field of disaster vulnerability, and humanitarian operations in the displacement context. The model drew upon the Pressure and Release model from Wisner et al. (2004) and research from Birkmann et al. (2013), and Cannon (2008a), proposing its application in the context of humanitarian practitioners working in response to forced

displacement. Embedded within the model are eight propositions that are used to guide the investigation.

2. *Empirically Investigate disaster vulnerability and humanitarian operations in the context of forced displacement using the Rohingya refugee crisis in Cox's Bazar as a single case study strategy*

Objective two was met in chapters four and five. Chapter four presents the background for the case study on the Rohingya refugees. The chapter provided a detailed analysis of the effects of displacement on the Rohingya refugees, the role of the humanitarian sector in reducing their vulnerability, and a hazard profile of the region. Chapter five expanded upon this through data from interviews with humanitarian practitioners working in response to the crisis. In this chapter, the interview transcripts were coded and organised into categories and themes.

3. *Identify the humanitarian operations factors impacting the disaster vulnerability of Rohingya people displaced to Bangladesh*

A thematic analysis of the interview data was undertaken using Creswell's (2013) approach to qualitative inquiry. The analysis process involved coding from literature, coding from interview data, and categorisation into sub-themes and themes. The key limiting factors were presented at the end of chapter five with table 8 based on Wisner et al.'s (2004) progression of safety.

4. *Revise the conceptual framework based on the case study findings*

Chapter six explored the emergent themes in the context of the broader literature to gain an understanding of what the findings could influence in the literature. From this, the conceptual

model was revised. Additionally, recommendations were made to embed the findings within the framework.

5. *Develop theoretical propositions about how humanitarian agencies contribute towards responses to disaster vulnerability amongst displaced populations*

Chapters six and seven present the propositions from the discussion. In chapter six, the author presents an original model, *the vulnerability headway model*, that proposes an alternative approach to addressing the progression of vulnerability in humanitarian projects. Implications for theory and practice are presented in chapter seven.

7.2.   Summary of Key Findings

The study revealed a pertinent disconnect between existing disaster vulnerability knowledge and the implementation of response activities within the humanitarian sector. This emerged as practitioners noted that there is a disconnect between what is known about reducing disaster vulnerability and what is implemented in practice. This disconnect is attributed to a number of factors, including conflict, misuse of power, corruption, poor governance, a lack of political interest or will, as well as more subtle issues such as silo thinking and competition among sectors, interests, and actors at different scales.

Another key finding is that improving access to resources is not being adequately utilised as a means to reduce vulnerability among displaced populations. For people to lead dignified lives and support their families and communities, they need stable and productive livelihoods. This can be achieved by ensuring access to resources and locations without causing harm to others or future generations. A focus on livelihoods and resources is an essential foundation

for reducing disaster vulnerability. This means that through increasing productivity and access to resources, individuals and communities will have the surplus time and money to invest in reducing disaster risk. This shortcoming is partly a result of humanitarian actors facing external influences that limit their ability to effectively implement these programmes.

Government influence can be a major obstacle for humanitarian organisations in their efforts to reduce disaster vulnerability amongst displaced people. Access restrictions and competing priorities can lead to a lack of coordination and cooperation between humanitarian organisations and the government, which can impede efforts to effectively address the needs of displaced populations. Additionally, donor influence on humanitarian organisations can lead to a lack of flexibility and a narrowed focus on short-term solutions. Donors may only be willing to fund certain types of interventions or activities that align with their priorities, which may not necessarily be the most effective in reducing disaster vulnerability among displaced people. As a result, organisations may not be able to implement programmes that are tailored to the specific needs of the displaced population they are serving, which can hinder their ability to reduce disaster vulnerability.

Furthermore, coordination issues were found to be affecting the outcomes of humanitarian programmes, with practitioners noting that the limitations of the cluster approach, lack of institutional knowledge, and difficulties in monitoring and evaluation can impede the ability of organisations to effectively reduce vulnerability. Coordination issues within the humanitarian sector can take many forms and can have a significant impact on the ability of organisations to effectively address the needs of vulnerable populations. One common issue is the lack of coordination between different organisations working in the same area. This can

lead to inefficiencies and duplicated efforts, as well as a lack of consistency in the services and support provided to affected communities.

Issues related to social cohesion and aid equity were identified as not being adequately addressed by the humanitarian sector, with practitioners noting that there is a lack of localisation of the NGO labour force, strain on local resources, lack of integration, and unequal aid delivery to refugees over the host community. To effectively address the needs of all affected communities, a comprehensive, nuanced, and flexible approach is needed, one that takes into account these various factors and their complexity.

The research identified a potential vulnerability trap in the case study. A lack of allocation of resources to the root causes of vulnerability can lead to overall disaster vulnerability increasing over time. Focusing activities and allocating resources primarily to 'unsafe conditions' and certain 'dynamic pressures' creates a band-aid short-term fix that can be unravelled by the next disaster event. This creates a net reduction in the overall vulnerability in time as shown in the *Vulnerability Fall-back Loop Model* shown in <u>figure 24</u> and prevents the achievement of incremental progress demonstrated in the *Vulnerability Headway Model* shown in <u>Figure 23</u>.

7.3   Implications for Theory

This study can influence theory by providing in-depth and detailed insights into specific phenomena and issues. This can contribute to the development or refinement of existing knowledge in the following ways:

- It highlights the importance of local ownership and participation in humanitarian responses. The limitations of the cluster approach and other coordination issues emphasise the importance of involving local organisations and communities in the decision-making and implementation of aid interventions. This can help ensure that the interventions are more closely aligned with the specific needs of the affected population. Issues related to a lack of localisation and cultural understanding call attention to the need for context-specific approaches to humanitarian responses. This means taking into account the unique cultural, social, and economic context of each crisis and designing interventions accordingly.

- It emphasises the need for more research into more effective monitoring and evaluation of humanitarian operations. The difficulties of monitoring and evaluation highlighted in this discussion underscore the need for better systems and processes to measure the impact of humanitarian interventions and identify areas for improvement, including those specifically focusing on the long-term impacts on disaster vulnerability.

- It demonstrates the need for research with a greater focus on external influences on the humanitarian sector. Many of the key limitations in the humanitarian sector's approach to reducing vulnerability were external to the organisations. In particular, the role of donors and host governments in affecting disaster vulnerability needs to be further investigated.

- The study contributes to the further development of the Pressure and Release model by examining its application in the context of displaced populations and the limitations faced within humanitarian operations.

7.4   Implications for Practice

Through analysis of the interview data with humanitarian practitioners, it is possible to provide insight into the changes that are necessary for the humanitarian sector to address the complex challenges of forced displacement and reduce vulnerability to disasters more effectively. However, it is important to note that many of the findings pointed to external influences as a key limitation that calls for larger changes outside of the humanitarian sector. Humanitarian practitioners can better address the disaster vulnerability of displaced people in the following ways:

- Through maintaining higher levels of localisation of the labour force within NGOs to ensure a better understanding of the cultural and social context and in turn design interventions that are better suited to the specific needs of the communities as well as creating sustainable solutions that will continue beyond the organisations' presence.

- Through an understanding that traditional approaches to designing camps as temporary places are inadequate for addressing disaster vulnerability, as displacement events are often more long-term than estimated. Standards for non-residential buildings such as economic enterprises, schools, clinics, warehouses, administrative offices, and community centres are missing.

- Through designing a response to forced displacement that better takes into account the needs and concerns of both the displaced population and host communities. This integrated approach ensures the camp design process is seen as a dynamic process able to adapt to changing needs.

7.5   Scope for Further Research

The study has provided a detailed analysis of the disaster vulnerability of displaced populations and the role of the humanitarian sector. However, there is scope for further research in several areas to further enhance understanding of the issue and inform effective interventions. Firstly, further research could include a longitudinal study with a focus on the long-term impacts of forced displacement on both displaced individuals and host communities. Further research is also necessary to deductively examine the models presented in this research. The *Vulnerability Headway Model* and the *Vulnerability Fall-back Loop Model* could be tested in other displacement crises to improve generalisability.

Propositions that have been made through abductive inquiry are not proven but can now inform hypotheses that can be used to design deductive inquiry. Two emergent hypotheses from this study that could be tested in future studies include:

1. An integrated approach to displacement crises will reduce disaster vulnerability over time to a greater effect than continuously focusing on short-term interventions.

2. Without shifting the focus of activities towards the root causes of vulnerability early in the crisis, a vulnerability trap can emerge resulting in increased disaster vulnerability over time.

Throughout this study, related issues emerged that were outside of the scope of this research, however, future research in this field may look to further explore these related topics. This research has identified the following areas as worthy questions of further investigation:

What specific steps and measures can be taken to successfully implement a development-focused approach from the early stages of a displacement crisis, taking into consideration the various challenges and obstacles that such a crisis presents in terms of both the needs

and capacities of displaced individuals and host communities and the availability and coordination of resources from various actors?

What actions and strategies can be put in place to improve the daily lives of refugees and internally displaced persons during their displacement, particularly in situations of prolonged displacement where traditional solutions like resettlement, local integration, and return may not be viable? How can the approach consider the unique challenges and needs that come with prolonged displacement, such as limited access to education, healthcare, and livelihood opportunities, cultural and language barriers, lack of formal legal status, and other socio-economic issues, to effectively improve the well-being of the displaced population and support their long-term integration into their host communities?

In what ways can improved advocacy and political dialogue with local and national authorities play a role in enhancing the access of refugees, IDPs and returnees to social and economic opportunities, skills development, education, public health, and freedom of movement?

What are the potential benefits of taking a developmental, inclusive, and integrated approach to displacement that not only addresses the needs of the displaced population but also improves the lives and economic opportunities of host communities and contributes to general development?

How could an integrated approach effectively plan and implement long-term strategies to achieve sustainable reintegration of returnees to their countries and areas of origin while considering the various factors that can impact the process, such as access to resources,

social and economic opportunities, potential security risks, and cultural and community dynamics?

7.6   Limitations of the Study

The study invited professionals within the humanitarian sector working within the Rohingya Refugee Crisis in Bangladesh to participate. These interviewees were from various local NGOs, INGOs and UN agencies. The international aid sector generally has a high turnover of staff. This presents many issues for practice, however, it also creates a limitation for data collection. The selection criteria for participants in this study required potential participants to have worked in the area for at least three months. This criterion was necessary to ensure that participants were adequately familiar with the crisis. However, given the high turnover, there are a large number of humanitarian practitioners with vast experience abroad but with less than three months of experience in this particular programme. Although we believe that this was a necessary criterion to ensure familiarity with the context, it undoubtedly led to the exclusion of some potentially valuable participants.

7.7   A Way Forward

This study has focused on a single pressing issue relating to the plight of displaced populations. However, this is only a small aspect of their experiences and does not address the reasons behind their initial displacement. In addition to the research topics highlighted in *section 7.5*, it is also valuable to advocate for the displaced and ensure that action is taken to improve all aspects of their lives. Human displacement is a growing crisis that affects millions

of people around the world and is likely to worsen through the impacts of climate change. Forced to flee their homes due to conflict, persecution, disasters, or poverty, these individuals and families face an uncertain future marked by vulnerability, insecurity, and a lack of basic necessities. This humanitarian crisis requires an urgent and comprehensive response from the global community. This includes promoting peace and stability, addressing poverty and inequality, and addressing the drivers of conflict and persecution. The international community needs to work together to create an enabling environment for the protection of human rights and the resolution of conflicts, as well as to support the development and implementation of programmes aimed at reducing poverty and inequality. We must also challenge the status quo that largely sees displacement as a temporary and manageable problem. Displacement is a long-term and complex issue that requires a sustained and holistic response. This includes not just providing food, shelter, and medical care, but also addressing the needs of communities and individuals for education, employment, and economic opportunity. We must work to create a more inclusive and equitable world, where the rights and dignity of all people, regardless of their status or background, are respected. This means advocating for the rights of refugees and displaced people, promoting their participation in decision-making processes, and ensuring that their voices are heard in the development of policies and programmes that affect their lives. We must also work towards greater transparency and accountability from those who hold power and responsibility. This includes greater transparency in the allocation of funding and resources, greater transparency in organisations, and holding other actors accountable for the actions they take in response to displacement crises.

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Appendices

Appendix 1 – Full Analysis Codebook

Table 9: *Analysis codebook*

Theme 1 – Disconnect between knowledge and humanitarian operations	
Category 1 - Disconnect between policy and operational level	
Code	**T1P1C1:** Frustration with restrictions inhibiting best practice.
Definition:	Participants expressing frustrations with restrictions stopping them from implementing activities they believe are better suited.
When to use:	Apply this code when participants make a comment about how they were restricted from undertaking an activity that they believed was a better option
When not to use:	Do not use this if it is a procurement-based restriction. For example, a lack of resources due to supply chain disruption.
Example:	*"The government of Bangladesh doesn't want refugees, a million refugees here for 10 years. So they have some programming restrictions. So we can't really do livelihoods. We can't really do education. So our ability to enable refugees to be self-sustaining, is limited, which is our goal as **[organisation name]** as it should be to make ourselves null and void. And for the people, the communities that we're serving to be able to kind of, you know, live without our services and assistance. So that's obviously quite difficult to do. We're being prohibited from doing a lot of that." – INGO04*

Code	**T1P1C2:** Lack of understanding of contextual issues at higher levels.
Definition:	Participants reflecting on issues within the camps that are not understood at the country or international offices.
When to use:	Apply this code when participants comment on issues that are broadly understood within the camps and operational staff but are not fully understood at higher levels in the organisation.
When not to use:	Do not use this code if the issues will not be affected by decisions made at higher levels in the organisation.
Example:	*"It started just like people adding to what is there, adding a layer of concrete on top of the sandbags. And the last thing I saw were like proper stairs made of concrete. So I think a lot of the things would have been little by little tolerated and allowed, but since there's no like announcement or official guidelines, people will just try and build what they need. So a lot of things are happening informally because otherwise it takes too long or just gets rejected because those higher up don't understand the local need. But also because people find their way to make things more permanent, and there's nothing anyone can do" - NGO03*

Code	**T1P1C3:** Critique of uninformed policy.
Definition:	Participants commenting on policy which they do not believe is well-informed.
When to use:	Apply this code when participants reflect on policy that they do not believe is created with a full understanding of the implications.
When not to use:	Do not use this code if they are only referring to policy that informed but just unfavourable
Example:	*"There is policy blocking most long-term projects. Like even changing curriculum. Something that is definitely a long-term threat to the stability of the population. So how to improve the sustainability of a camp where you're not allowed to help people help themselves. I mean we are still feeding like 900,000 people a month. And I'm sure*

	they would always do that to some degree, if you look at that alone as like a self-reliance sort of thing, like where food is still the number one need, then that's like, okay, you're still really hyper vulnerable when you're mentioning that." – INGO07

Category 2 – Local Advocacy

Code	**T1P2C1:** Access to a political voice.
Definition:	Participants reflecting on the refugees' lack of a political voice.
When to use:	Use this code any time that a participant mentions a refugee having or not having access to a political voice.
When not to use:	Do not use this code if they are referring to the organisation's or host community's political voice.
Example:	*"They [the refugees] are unable to advocate for what they need. They cannot influence when looking at larger issues of legal status of issues around repatriation, relocation, issues around, I mean I think our big points for the year are making sure that the refugees are consulted and decisions that are being made about them in the camps. We worked with emerging civil society organisations in the camps as well to try to support them in a nondirective sort of way, to help them sort of take up and express their rights in the way that they want. So one of the big things we do is try and make sure that their voice is heard. It is really one of our biggest challenges." – INGO14*

Code	**T1P2C2:** Advocacy to Government
Definition:	Participants reflecting on participating in advocacy to governments
When to use:	Use this code any time that a participant mentions advocating to government whether actual or potential
When not to use:	Do not use this code if advocacy is directed at a non-government agency
Example:	*"…even in New York and Brussels, working sometimes we will equally share with other NGOs, brief member states on why are we seeing whatever it is we have and what do we recommend to them to recommend to the government. It's a bit like a puzzle and sometimes it's not that straightforward and sometimes you don't see results right away, but it's the way how we do advocacy." – INGO02*

Code	**T1P2C3:** Calls for increased rights
Definition:	Participants reflecting on a necessity to advocate for rights
When to use:	Use this code any time that a participant mentions that the refugees are lacking rights
When not to use:	Do not use this code if it is in reference to the host community
Example:	*"…get past these barriers and responses just through advocacy through the government because it seems like a lot of the problems stem from the government. Advocacy here is quite good, we've been in Bangladesh since 1950 and so we have very good relations with the government, through Dhaka. We obviously also have a global platform. We also are a child rights-based organisation, so we have a lot less risk on us with advocacy because we speak from a child rights perspective. And so that's very difficult for governments to argue with." – INGO01*

Category 3 – Understanding Theory

Code	**T1P3C1:** Pragmatism over theoretical best practice

Definition:	Participants mentioning that decisions need to be compromised for pragmatic reasons
When to use:	Use this code any time that a participant mentions decisions being based on pragmaticism rather than what is understood to be best practice
When not to use:	Do not use this code if it is in reference to a compromise due to donor or government restrictions
Example:	*"…put in steps in the hillsides and putting some concrete, put anything like shrubbery, you know, just and try to mitigate the effects, but nowhere near on the scale that's needed. It's a difficult balance, you know, hundreds of thousands of people arrive and set up stuff and they just need somewhere. And if you take the time to, to plan that properly and put that in place with all the relevant DRR aspects in place, it would take months. So what are people supposed to do, what are 100,000 people supposed to do for three months while we're working on that. So the people that are in an area that's prone to landslide just have to wait. It's up to the government if there is a chance to relocate."* **– NGO03**

Code	**T1P3C2:** Not being up to date on literature
Definition:	Participants admitting to not being familiar with research in the field
When to use:	Use this code any time that a participant mentions that they are not familiar with the research within the field
When not to use:	Do not use this code if they are referring to someone else or the organisation
Example:	*"I am honestly not across the studies, I think years ago I would have, I would have thought about this in this very academic way and in a theoretical way. I think you need to distance yourself from it because if you are in the field, then it's more operational. Obviously everyone that's working here has a role in it. They are doing good. Like really it's true humanitarian, but yeah, I think, when you kind of scale out and look at the different donations that come through and especially government donations, then it becomes a bit more tainted. Like, I really think that donors aren't in a position to say how the money should be spent because the organisations, the professionals are they doing what they can to improve. And then all of a sudden you get this donation, it says, no, it needs to be spent this way. And you need to measure these indicators. I think that's really dangerous because you're just going to take whatever money you can get."* **– INGO08**

Code	**T1P3C3:** Policy not matching theory
Definition:	Participants reflecting on a disconnect between theory and policy
When to use:	Use this code any time that a participant mentions that policy is contradictory to what is known in the research
When not to use:	Do not use this code if the contradictions are outside of policy
Example:	*"…as an industry, generally we are trying to move towards more cash programming because we understand that different households and individuals need different things. It gives them the flexibility in the agency to buy what they need. Which is preferable to giving them stuff as standard that we think they need. We do a lot of research into this for years and years. We contextualize and we ask questions, and we try and make sure that the standard hygiene kit, whatever meets their needs, but that assumes that everyone has the same need. And that's not the case. That's why very quickly these marketplaces spring up selling aid because we're not quite getting it right. Yet the government won't let us do cash-based programmes."* - **INGO06**

Theme 2 - Livelihoods and access to resources as risk reduction

Category 1 – Social considerations in project design

Code	**T2P1C1:** Lack of DRR beyond shelter cluster
Definition:	Participants mentioning DRR activities do not occur outside of the shelter cluster
When to use:	Use this code any time that a participant mentions that risk reduction only occurs within the shelter cluster or camp planning
When not to use:	Do not use this code if the activities fall under the shelter cluster or camp planning
Example:	*"I don't really know about that [reducing disaster risk], you could talk to the shelter specialists or the CICs. They are working in this area"* **- NGO01**

Code	**T2P1C2:** Mention of social capital
Definition:	Participants mentioning the social capital of the refugees
When to use:	Use this code any time that a participant mentions social capital of the refugees whether positive or negative
When not to use:	Do not use this code if they are referring to the host community
Example:	*"Most of the social capital just kind of happens organically. We don't do much to force it. But in terms of the vertical connections, that is where we need advocacy. They don't have any social capital with power positions or with other groups."* **– NGO04**

Code	**T2P1C3:** Potential for self-recovery
Definition:	Participants reflecting on the ability of the refugees to self-recover after disasters
When to use:	Use this code any time that a participant mentions the capacity or lack thereof the refugees to self-recover
When not to use:	Do not use this code if they are referring to the host community
Example:	*"so we're not allowed to give out cash in the camps because the government doesn't allow that. So they would be largely reliant on the humanitarian sector to distribute food, to rebuild the shelters, to handle materials for temporary shelter, that kind of thing. So they don't have access to a suitable marketplace. I don't know what their access is to cash, and I don't know what materials, I mean from what I've seen in the markets, it's mostly small household items. But I don't think there are tarpaulins and this, I'm sure they're available somewhere, but they're probably quite expensive."* **– NGO04**

Code	**T2P1C4:** Cultural aspects affecting vulnerability
Definition:	Participants reflecting on cultural aspects affecting vulnerability
When to use:	Use this code any time that a participant mentions that the cultural practices of either the host community or refugees is impacting vulnerability
When not to use:	Do not use this code if they are referring to cultural practices within organisations
Example:	*"…and in relation to vulnerability as well. What I mean by that is the Rohingya themselves, contribute to vulnerability, particularly women and adolescent girls, because women have a lot of, there's a lot of restrictions when it comes to movement of women within the communities. Women, those that are married, need to secure permission from their husband before they can participate in any activities, even, like*

	just bringing the sick child to the hospital That puts the risks, a lot of risks on the part of the child and also the woman. And in terms of the adolescent girls, only a small percentage of them in the past has access to education. And when we say education, it's not even formal, we're just talking about very basic literacy and numeracy skills. It's just two hours in a week or twice in a week. Women are also subjected to a lot of threats, especially those who are volunteering for different organisations." **-INGO10**

Code	**T2P1C5:** Lack of trust
Definition:	Participants reflecting on a lack of trust
When to use:	Use this code any time that a participant mentions a perceived lack of trust from the refugees
When not to use:	Do not use this code if it is in reference to a lack of trust to international governments
Example:	*"Many don't want to register for aid. Which is obviously a massive problem because they think that their data will be given to the government of Myanmar. I don't know why, maybe because we used to force them back. So there was a lot of fear around that and I think that will ebb and flow like everything. And there's been a lot of pressure on them to register from CICs. It's led to a lot of confusion. And then coupled with it happening around the time of the repatriation, people were thinking, how did they get on this list, you know? And so they think, oh, I've given my name, it must be how I'm on the list, which wasn't true. And that is not true obviously, but you could see how people would make that connection. So that's one of our kind of big concerns is how do we make sure that people are still going to be able to access aid and maintain their trust, their trust in us is low, very low after, especially after that experience"* **– NGO03**

Category 2 – Education programmes for long-term impacts

Code	**T2P2C1:** Language education
Definition:	Participants reflecting on languages used in education
When to use:	Use this code any time that a participant mentions issues relating to the language of education programmes
When not to use:	Do not use this code if they are referring to the host community
Example:	" And the discussion like education, again, the government of Bangladesh, they don't want the refugees to use the Bangladeshi curriculum. In Rakhine they don't have the curriculum education, so that's a challenge. But they have the madrasas in Arabic, but madrasas is in formal school for them. Okay. So, starting from literacy, you need to figure out what kind of literacy needs to be discussed then what they require here. We use English for a while again. Like it will be benefit for here and for when they return as well. But for skill development, we are thinking both." **– INGO15**

Code	**T2P2C2:** Matching skills to context
Definition:	Participants reflecting on skill development for the local context
When to use:	Use this code any time that a participant mentions programmes designed to develop skill necessary in the local context
When not to use:	Do not use this code if they are only referring to skills within basic education
Example:	*"one of the things you're taking into consideration is raising expectations amongst community. If we start training them in different skills and then they can't access those skills, it's a wasted time and resources, but it also is emotionally difficult for them, those people to, to deal with"* **– UN07**

Code	**T2P2C3:** DRR education
Definition:	Participants reflecting on DRR education programmes
When to use:	Use this code any time that a participant mentions education programmes relating to disaster risk reduction
When not to use:	Do not use this code if it is referring to general education curriculum
Example:	*"It's really difficult at the moment. Now we basically are just doing the very basics around early warning and what to do. But even with the flag system, it is not that clear and people don't know who is in charge, what to do, they just panic if there is a warning."* – **NGO05**

Category 3 – Camp planning and human right to shelter

Code	**T2P3C1:** Egress issues
Definition:	Participants reflecting on egress issues
When to use:	Use this code any time that a participant mentions disaster risk issues associated with egress
When not to use:	Do not use this code if they are referring to the access of humanitarian practitioners
Example:	*"…first of all, the main challenge, is the physical environment of the camps, which everybody has struggled with from the beginning, the overcrowding, the terrain, the accessibility of the sites from here. And then there's the sheer size and scale. And it seems to get worse overtime. The deforestation makes the environment worse and the population is still growing"* – **INGO09**

Code	**T2P3C2:** Resistance to hazards
Definition:	Participants reflecting on the shelter resistance to hazards
When to use:	Use this code any time that a participant mentions the physical resistance of structures or lack there of
When not to use:	Do not use this code if they are referring to resistance of things other than structures
Example:	*"Even in the initial phase of the response, our priority would be to build as much as possible semi-permanent structures. At least we were allowed to do that last year. So we had to build these kind of temporary bamboo structures. We weren't even allowed to have treated bamboo because it was seen as too permanent. So we've now got in some of the camps, some of the CIC we've said, okay, you can use treated bamboo and build semi-permanent structures, but that also means we need to like shut down our service, rebuild everything and then start up again."* - **NGO01**

Code	**T2P3C3:** Population density/available land
Definition:	Participants reflecting on population or land scarcity issues
When to use:	Use this code any time that a participant mentions an issue with the growing population or scarcity of suitable land
When not to use:	Do not use this code if they are referring to population density in Myanmar
Example:	*"obviously, overcrowding has been a massive issue. It is only getting worse as more people come in, there's not really much space to use. I have been getting the feedback and complaints that quite often people will say, your child friendly space or your*

	education space where everyone's up on a Hill and my kids can't go up there, or you know, your health services are up on a Hill or, that they're not where we're located, or like, I'm pregnant. I can't travel easily." - **INGO08**

Code	**T2P3C4:** Adequate shelter
Definition:	Participants reflecting on the adequacy of shelter
When to use:	Use this code any time that a participant mentions that shelter is either adequate or inadequate
When not to use:	Do not use this code if they are talking about public buildings
Example:	*"… we have already discussed this with the shelter sector that providing like the 4.5 square meter per person is impossible in the field. And they agreed that this is not possible for us to do. Now, the thing is we are aiming to provide them is durable shelter, so that in the cyclone, and in the rainy season, they are not affected. Like no strong water can get into the site. And now the shelter sector is trying to implement the kitchen inside the house so that they do not need to go outside in the rain. So these things are mainly focused now in the midterm shelter and the transitional shelter as well, so that we can, try to accommodate if it's possible. It is not meeting all standards and it is not technically adequate, but it is possible right now."* **– INGO04**

Theme 3 - External influences opposing NGO intentions or vulnerability theory
Category 1 – Government influence on projects

Code	**T3P1C1:** Mention of Government elections
Definition:	Participants reflecting on the upcoming national elections
When to use:	Use this code any time that a participant mentions the Government elections as an influencing factor on the response
When not to use:	Do not use this code if it is mentioned not in relation to the response
Example:	*"With national elections coming up in December, there is pressure on the current government to make promises for action regarding the refugee crisis … It is likely that the government will not change following the elections next month. The opposition leader has recently been sentenced to 7 years imprisonment for embezzlement. Some say that the claims were fabricated to compromise the election results. The current government is more progressive and has brought important change to the country. But their heavy-handed approach has sparked strong criticism."* **– INGO01**

Code	**T3P1C2:** Bhasan Char plans
Definition:	Participants reflecting on Bhasan Char plans
When to use:	Use this code any time that a participant mentions the process of moving, or the conditions on, Bhasan Char
When not to use:	Do not use this code if they are only discussing the location without mentioning the conditions or political issues
Example:	*"The government has stated that 30,000 will be sent back to Myanmar this year. There is also pressure to start using the camp built on the island, Bhasan Char … One the prime minister's advisers told reporters that, once there, they would only be able to leave the island if they wanted to go back to Myanmar or were selected for asylum by a third country."* **– NGO10**

Code	**T3P1C3:** Funding restrictions (FD7)
Definition:	Participants reflecting on restrictions on funding
When to use:	Use this code any time that a participant mentions the foreign donation Government restrictions (FD7)
When not to use:	Do not use this code if they are referring to restrictions from the funding body
Example:	*"… the government rejected some large donation because it didn't align with their goals, because it was focused too much on development and they want to, they don't want to see the population integrated instead of repatriation. So it's interesting, like sometimes even large sums of money. It just rejected."* **- INGO04**

Code	**T3P1C4:** Competing interests
Definition:	Participants reflecting on a perceived competing interest
When to use:	Use this code any time that a participant mentions perceived competing interests with donors, organisations, or governments
When not to use:	Do not use this code if they are referring to competing interests within the refugee group
Example:	*"If more funding goes through long-term funders, like the world bank, the Asian development bank who are willing to willing to put money into long-term infrastructure. So it's surreal to feel the tension between those who feel that the best solution and the quickest solution of getting them back to Myanmar is best for everyone, and those who feel that making the camps better and enabling the environment to be, to facilitate more opportunities for Rohingya can be combined with that longer term vision of repatriation."* **– INGO10**

Category 2 – Donor influence on projects

Code	**T3P2C1:** Donor driven indicators
Definition:	Participants reflecting on indicators that were set by the funding bodies
When to use:	Use this code any time that a participant mentions that an indicator used to measure project success is required by the donor
When not to use:	Do not use this code if the indicator would have been used regardless
Example:	*"… in a lot of our projects, we're generally just being asked to count things. We might have a couple of more outcome level indicators. For example, looking at the effects we're having on the wellbeing of children. But I would say that it's not, and this is from the donor's side, there's not an awful lot of expectations and with most of our projects there's not a specific evaluation requirement. There might be some kind of outcome level monitoring but it's more from [our organisation] saying, actually yeah, this isn't good enough for us. We want to understand the outcomes and the impacts of what we're doing. But it's more internally driven I think than donor driven."* **– INGO13**

Code	**T3P2C2:** Cash based initiatives
Definition:	Participants reflecting on the use of cash-based initiatives
When to use:	Use this code any time that a participant mentions the use of, or restrictions on cash-based initiatives
When not to use:	Do not use this code if the initiative is for the host community
Example:	*"People have all sorts of needs that are not met by the, by the humanitarian community, this could be religious thing for religious festivals or for just about*

	anything, really. Anyone in the world who gets paid any kind in any kind of job. We'll find a way to try and turn that into cash because people are used to making their own choices and having something they can store safely and that they can use in small quantities for emergencies, for social transactions, helping other people in suddenly need to have needs. So, yeah, I think it's unavoidable" – **UN04**

Code	**T3P2C3:** Short-term focus
Definition:	Participants reflecting on a focus on short-term outcomes
When to use:	Use this code any time that a participant mentions a focus on short-term outcomes as a priority
When not to use:	Do not use this code if they are referring to outcomes over a greater than 5-year timespan
Example:	*"humanitarian work is always, you know, it is by nature and design, it's meant to be lifesaving and is not meant to be a 15 year prospect and is deeply inadequate like in, in the longer sense of how we understand displacement today and how long people are usually displaced for. So in terms of what is totally not good enough. Then I think the shelters. One thing we did have was no cyclone last year by the grace of God. But if we had, I mean we had even just tiny cyclone and the camp would look like a pile of toothpicks."* – **UN05**

Code	**T3P2C4:** Temporal perspective of cash flow
Definition:	Participants reflecting on funds changing over time
When to use:	Use this code any time that a participant mentions the funding cycle and how they need to prepare for less funding in subsequent years
When not to use:	Do not use this code if they are mentioning that money is not enough, but not in the context of the funding cycle
Example:	*"Eventually we will be able to build using kind of half a brick wall and a bit of concrete and treated bamboo. That's the basic need, but again, doing that in the second year of a response when donors are already starting to get tired of giving money. Like we expect the money to decrease in the next year, from now on basically. And so having to rebuild more expensive structures now is going to be difficult for us as a sector."* – **INGO09**

Category 3 – International political agendas

Code	**T3P3C1:** Myanmar open to repatriation
Definition:	Participants reflecting Myanmar's position on repatriation
When to use:	Use this code any time that a participant mentions that Myanmar is either encouraging or discouraging repatriation
When not to use:	Do not use this code if repatriation is mentioned by the Bangladesh Government
Example:	*"[our organisation] is working on the assumption that this will be a protracted crisis. Partly due to what we saw with the Korean refugees in Thailand from the 90s. Also the previous influx here, there's still a hundred thousand refugees here from the influx years ago. And the way that refugees were repatriated, there was no safety provided or voluntary choice previously. That was kind of allowed to happen because many reasons, but there's now a lot more of international attention on the crisis. So it's unlikely that would be allowed to happen without an enormous amount of international outcry. I think that would be too much in social pressure for that not to happen"* – **INGO03**

Code	**T3P3C2:** Compromising principles and standards
Definition:	Participants reflecting on a compromise of principles and standards
When to use:	Use this code any time that a participant mentions that a principle or standard has been compromised in the response
When not to use:	Do not use this code in any other case
Example:	*"I mean, we have all these, principles and standards that we tried to reach. They're impossible to reach ideally. But I think they're useful to have because it means that we can take a stance. Um, one of the main issues is that our donors are mostly government donors. So it's the government aid programmes that give us money. So, they obviously come with, potential depending on the, the aid, but can become with the political agendas, which can affect how we program."* **– NGO06**

Code	**T3P3C3:** Lack of press freedom
Definition:	Participants reflecting on the press freedom of refugees
When to use:	Use this code any time that a participant mentions restrictions on the consumption or production of news media
When not to use:	Do not use this code if they are referring to the freedom of information to humanitarian sector
Example:	*"… even at the start, the refugees couldn't have phones or radios let alone internet access. It is hard for them to do their own research. Rumours are still how a lot of information is spread in the camps."* **- INGO04**

Theme 4 - Organisational and coordination concerns
Category 1 – Cluster approach

Code	**T4P1C1:** Mainstreaming of DRR
Definition:	Participants reflecting on the mainstreaming of DRR across clusters
When to use:	Use this code any time that a participant mentions DRR activities taking place across multiple clusters/silos
When not to use:	Do not use this code if they are referring to DRR within the shelter cluster
Example:	*"Now we really need to start strengthening whatever system is there. So that it becomes more sustainable and that links with long-term development perspective as well, because now we're very much aware of the new way of working in terms of, if you are doing emergency work, you also need to be thinking about development programming. And as much as if you are to do development work, you should also be talking about the emergency preparedness. So we're very much cautious about that in all the work that we do."* **– INGO03**

Code	**T4P1C2:** Issues with Coordinating body
Definition:	Participants reflecting on issues with the coordination lead
When to use:	Use this code any time that a participant mentions issues with IOM and UNHCR coordination
When not to use:	Do not use this code if they are referring to coordination within their organisation
Example:	*"…it has been very challenging, because of the different ways that IOM and UNHCR are set up. They separate the camps by which one of them is managing and they have different ways of operating. So for example, there was something with our health team where we couldn't call an IOM ambulance for UNHCR camp. So it makes the referral*

system a bit more difficult. It makes complementarity and coordination between our programming a bit more difficult." - **INGO04**

Code	**T4P1C3:** Critique of UN approach
Definition:	Participants reflecting on the overall UN approach
When to use:	Use this code any time that a participant mentions issues with the cluster approach or broader coordination issues
When not to use:	Do not use this code if they are referring to the organisations approach
Example:	*"Because [our organisation]'s working across seven different sectors. We try and do it, in an integrated way, both in terms of geographic integration, in terms of like where our services are located. But also, for example, we started trying to integrate MHPSS which is mental health and psychosocial programming, into our health services and into our child protection services as opposed to doing lots of different types of programming kind of quite discreetly."* **– INGO05**

Category 2 – Monitoring, evaluation and learning

Code	**T4P2C1:** Lack of feedback from beneficiaries
Definition:	Participants reflecting on MEAL activities
When to use:	Use this code any time that a participant mentions positive or negative aspects of monitoring, evaluation and learning activities
When not to use:	Do not use this code in any other case
Example:	*"Even though we've got a pretty good accountability system for collecting feedback and complaints and responding to them, We'd be working with hundreds and thousands of children and, every month we only get like probably 20 feedback or complaints from kids. So there must be something wrong."* **– INGO02**

Code	**T4P2C2:** Reliability of data
Definition:	Participants reflecting on a lack of reliability of data
When to use:	Use this code any time that a participant mentions double counting of data or other reliability issues
When not to use:	Do not use this code in any other case
Example:	*"like the specific kind of what the idea is around double counting. So when we're trying to track beneficiaries, because of the integrated nature of our programming, which makes sense in terms of, you know, if we're doing health programming with it, with the community, we're also doing wash programming and the different types of programming is complimentary."* **– INGO02**

Code	**T4P2C3:** Focus on output level indicators
Definition:	Participants reflecting on indicators to measure output
When to use:	Use this code any time that a participant mentions indicators being focused on short-term outputs
When not to use:	Do not use this code if they are referring to outcome level indicators
Example:	*"It also means that the same children and community members are participating in different types of our programming. And then also in terms of the way that our awards*

	worked because they're multi-sector and it's to do with the timeframes and things, it's quite difficult to count people. So we ended up spending a lot of time and energy on the basic working out how many people we've reached and like the unique numbers. Like they're kind of the real like bread and butter, like basics of monitoring, which means that we have less time and energy and effort to be able to spend on the, the more interesting kind of higher-level stuff. And looking at the actual outcomes of what we're doing and seeing the kind of change that we're making beyond just counting, like the number of people we're getting toilets to or whatever. So that's unique to this response." – INGO02

Category 3 – Lesson sharing

Code	**T4P3C1:** Sharing between organisations
Definition:	Participants reflecting on lesson sharing between organisations
When to use:	Use this code any time that a participant mentions lesson sharing between multiple organisations working on the response, formally or informally
When not to use:	Do not use this code if they are referring to lesson sharing outside of this response
Example:	*"We have working groups, that's the main way we share ideas. But even that is pretty limited. Probably the main way that lessons are shared are through staff. Everyone moves around a lot. The locals will work for lots of organisations and ideas or lessons are shared more informally. There should be more of this but it's really just not a priority, we are just too busy for more meetings, for more workshops." – NGO09*

Code	**T4P3C2:** Sharing between regions/deployments
Definition:	Participants reflecting on lesson sharing between different crises
When to use:	Use this code any time that a participant mentions lesson sharing between different organisations or within the same organisation across different deployments
When not to use:	Do not use this code if they are referring to the private sector
Example:	*"… would do like a big lesson learning workshop after the pilot and sort of say, what's working, what's not working? how would we scale up? and then, there's the Asia regional office, and they would be the ones who'd be responsible for synthesizing the learning that's come from this response. And then, like the earthquake response in Indonesia and different responses around the region and sort of collating it and synthesising it at the regional level. Yeah. And then all the different regions would do that. And then at the, what's called the centre, the head office in London, and they would integrate it on the global level." – INGO07*

Code	**T4P3C3:** Sharing with private sector
Definition:	Participants reflecting on lesson sharing with the private sector
When to use:	Use this code any time that a participant mentions lesson sharing activities with the private sector formally or informally
When not to use:	Do not use this code if they are referring to other NGOs
Example:	*"We're going to have lessons learned, workshops and other activities to see out our strategy. I'm also in charge of ensuring that we build national capacity of national staff because they are the ones that will be here in the long run. So I have to ensure that there is a systematic professional development programme for that one. I look into their training needs and also their capacity and they have, and then they come up with a tailored training capacity building programme that includes actual training sessions,*

supervision, coaching, and mentoring and things like that. Without this, our time would be wasted." **– INGO02**

Category 4 – Staff turnover

Code	**T4P4C1:** Building working relationships
Definition:	Participants reflecting on building working relationships
When to use:	Use this code any time that a participant mentions the necessity to build working relationships over time
When not to use:	Do not use this code in any other case
Example:	*"…It's like then working with the teams to actually use kind of use the data and like try and build sort of a culture of relationship driven decision making. So if the people keep on changing then we can't build that culture, it can't just be taught straight away."* **– INGO03**

Code	**T4P4C2:** Limitations on salary and opportunities
Definition:	Participants reflecting on limitations on salary and opportunities
When to use:	Use this code any time that a participant mentions that the organisation is limited in their ability to offer competitive salaries and opportunities for their staff
When not to use:	Do not use this code if they are referring to private sector positions
Example:	*"We lose staff all the time. I get it, you have to give up a lot to work here. Family, friends, and money compared to working back home. It is even hard with the development opportunities, we get lots of experience but it is not formal and not recognised. I think we are attractive for locals but expats will always come and go … there's relationships you like build the capacity of people and then they go off and join other organisations that pay better or you know, would have a more attractive package. So I think then all of the, the technical issues and stuff, a lot of it kind of springs from that basic challenge."* **- INGO07**

Code	**T4P4C3:** Turnover as a barrier to improvement
Definition:	Participants reflecting on high staff turnover as a barrier to improvement
When to use:	Use this code any time that a participant mentions that the high levels of staff turnover within the sector or organisation is limiting their ability to improve disaster vulnerability activities
When not to use:	Do not use this code if
Example:	*"There is often a gap, and there is a bit of a gap here in reports and evaluations feeding into our programmes, like closing that loop and feeding into our program design. That's partly because there's been a gap in my position for a long time and we've had huge amounts of turnover in the team. So they've been focusing on recruitment rather than existing staff."* **– INGO08**

Theme 5 - Social cohesion and equity issues

Category 1 – Localisation of NGO labour force

Code	**T5P1C1:** Impact of INGO/expats on region
Definition:	Participants reflecting on the impact of expatriates in the region

When to use:	Use this code any time that a participant mentions the impact that expatriates working in the humanitarian sector has on the local region
When not to use:	Do not use this code if they are referring to local humanitarian workers
Example:	*"Even with large organisations such as [our organisation] there are questionable recruitment processes at play. Many of the local employees are only in the lower positions of the organisation and are on a much smaller salary. One local employee with a degree said that her salary was hardly enough to pay for the hotel where she needed to stay. They determined it according to the cost of living in the area but didn't to take into account the rising cost of living due to the presence of many INGOs. Whilst foreign 'professionals' have a much higher salary inclusive of accommodation costs."* **– INGO01**

Code	**T5P1C2:** Lack of capacity
Definition:	Participants reflecting on a lack of capacity
When to use:	Use this code any time that a participant mentions that there is a lack of local capacity to localise the required activities
When not to use:	Do not use this code if the lack of capacity is not relevant to the response
Example:	*"it's not funding. That's okay. But if social work doesn't exist as a profession, you don't have child protection practitioners pre-existing in Bangladesh. Let alone those who speak the local dialect. So with the humanitarian response, you suddenly just scale up your case management services and you have to recruit locally because they need to get to speak the language, to provide casework support to kids. So when you recruit locally, you're recruiting people who speak the language and you're looking for empathy and a bit of emotional intelligence, I guess, but not an expert, you can't really recruit the casework skills because they don't exist."* **– INGO11**

Code	**T5P1C3:** No localisation of decision-making roles
Definition:	Participants reflecting on the localisation of decision-making roles
When to use:	Use this code any time that a participant mentions that localisation is limited to roles lower within the organisation which prevents local decision making
When not to use:	Do not use this code in any other case
Example:	*"…we immediately hampered the ability of local partners to take on those roles. And then we start working with local partners a lot of the time through the kind of implementation relationship where we say, we designed a project and we'd decide what should happen and when. And then we say, we need you to go and just read this over there and we need you to go implement. So it's not really an empowering strategic relationship. I mean it makes sense sometimes, if there's an emergency with 100,000 people who've been displaced and you need to get them food or access or whatever, then sometimes that makes sense. But in a situation like this where we do have access it should be different. A lot of the NGO didn't come in with the right approach. One of the first questions should be who are the local partners? What's their capacity? Who can we work with? Like who can we bring into our conversations about our response strategy?"* **– INGO12**

Category 2 – Strain on local resources

Code	**T5P2C1:** Construction materials
Definition:	Participants reflecting on strain on construction materials

When to use:	Use this code any time that a participant mentions difficulties in accessing construction materials
When not to use:	Do not use this code if the shortage is due to a supply chain issue rather than increased demand
Example:	*"it's really imperative to also support the host communities because, you know, automatically they will be stretched and there will be issues and competition around resources, construction materials, food, land. And again, with all indicators pointing to this emergency turning into a protracted crisis, it's imperative for us to reflect how we've really engaged the host communities and also support them so they are not left without materials"* **– NGO05**

Code	**T5P2C2:** Deforestation
Definition:	Participants reflecting on deforestation
When to use:	Use this code any time that a participant mentions the impacts or the practice of deforestation
When not to use:	Do not use this code if they are referring to practices before the crisis
Example:	*"The area was just dense hilly forest before. But it was the only area so now it is stripped and creating more issues. Until we brought in the LPG, it was worse, all the wood was being stripped for cooking. It makes flooding worse, it makes landslips worse, it makes draining worse."* **– NGO02**

Code	**T5P2C3:** Infrastructure strain
Definition:	Participants reflecting on infrastructure strain
When to use:	Use this code any time that a participant mentions an increase in the usage of local infrastructure causing either delays, wear, or damage
When not to use:	Do not use this code if they are referring to an issue present before the crisis
Example:	*"The dramatic increase in population has strained resources, infrastructure, public services and the local economy. The most affected areas are Ukhia and Teknaf, but the impacts are still evident across the state. Some of the pressures include rising food, firewood and transport prices. Additionally, there is scarcity of clean water, basic services, natural resources, and employment. Before the influx, 33% of the population lived below the poverty line and one in five households had poor food consumption patterns."* **– NGO05**

Category 3 – Integration and equity with humanitarian aid

Code	**T5P3C1:** Potential conflict with host community
Definition:	Participants reflecting on the possibility of conflict
When to use:	Use this code any time that a participant mentions growing tensions with the host community that could lead to a potential conflict
When not to use:	Do not use this code if they are referring to conflict within groups
Example:	*"We need to be working much more with the host community. So that's a big part of our strategy moving forward is to see how we can link our programming between the Rohingya and host communities. For many reasons, including, you know to help with integration because the host community is also extremely vulnerable and in need. And to like quiet down a bit of the potential conflict that can happen, because even now there are protests going on"* **– INGO03**

Code	**T5P3C2:** Mention of socio-economic status of hosts
Definition:	Participants reflecting on the socio-economic status of the host community
When to use:	Use this code any time that a participant mentions the specific socio-economic needs of the host community
When not to use:	Do not use this code if they are referring to the refugees
Example:	*"There are major issues with equity within Bangladesh. For example, when designing shelter for refugees there are minimum requirements like having at least 4.5m2 for each resident. In many cities in Bangladesh it is common for the local residents to have less than this. As conditions improve in the refugee camps we need to ensure that there is equity and that the locals do not suffer from the presence of the humanitarian actors."* **– UN04**

Code	**T5P3C3:** Disparity in assistance
Definition:	Participants reflecting on a disparity in humanitarian assistance
When to use:	Use this code any time that a participant mentions that either the host community or the refugees are receiving more aid in any particular area
When not to use:	Do not use this code if they are referring to disparity within groups
Example:	*"For refugees we built everything [when referring to latrines], right we pay for and build everything. For host community, we call it CLTS, community led total sanitation. It's zero amount of money from humanitarian actors. It requires the resource instead of INGOs resource. So what did they give the, they give this, they give a training, they give the training. So INGO give the training meeting again, meeting, setting the committee and give the training and in work and empowerment. In refugees empowerment only 20% 80% from NGOs. But in here, the other way around, you see the developed, you see the gap, right? In Host community you need 20% as resource, 80% empower, which unique. So in some communities they accept some cannot … But you cannot meet the requirement for all right. So that's, that's the, the challenge. Uh, and then insisting to do that with the pure development approach we are in trouble right. Because host community, they see very refugees getting everything well for us, you need us to discuss and then we need to build our own toilet for instance, we built our own drainage for instance, don't pay refugees. So that's the challenge."* **– INGO12**

Code	**T5P3C4:** Resistance to integration
Definition:	Participants reflecting on a perceived resistance to the integration of refugees
When to use:	Use this code any time that a participant mentions either the host community or refugees expressing an opposition to integration
When not to use:	Do not use this code if it is just an opposition to the migration in general
Example:	*"We know that, you know, there are many camps around the world now that have been necessary for 20, 30, 40 years. It's not really a sustainable model. So I think there needs to be a wider conversation in the humanitarian sector about how we respond to large groups of people. But the problem of course that needs to be a conversation with the governance because most governments and most populations of host countries don't want a million people to suddenly be in the towns. So it's a problem with the nation state and with the idea of a homogenous group that should be part of a nation State. This problem with this type of patriotism and the like philosophy that comes with*

everything nation state. So there's a lot that needs to be worked out in order to solve the refugee camp." **– UN02**

Appendix 2 – Disaster Model Selection Process

Table 10: Key disaster models

Model Name	Reference	Summary
Iceberg model	(Heinrich, 1941)	The iceberg model by Heinrich is a way of visualising the idea that the visible effects of an accident or disaster are just the tip of the iceberg and there are many long-term and hidden effects that are often not considered. The model highlights the importance of studying accidents to help identify unsafe practices.
Littlejohn six-stage model	(Littlejohn, 1983)	This model is a framework for understanding and managing the different phases of a disaster. The stages include pre-disaster, impact, rescue and emergency management, short-term recovery, long-term recovery, and reconstruction. Each stage has specific goals and activities that need to be undertaken in order to effectively respond to and recover from a disaster. The model emphasises the importance of planning and coordination among different organisations and agencies throughout the different stages of a disaster as a team approach.
Onion model	(Mitroff et al., 1987)	The model depicts a disaster as having several layers, including physical, organisational, psychological, and social layers. Each layer represents a different aspect of the disaster and has its own set of challenges and issues that must be addressed. The model emphasises the need to consider the multiple dimensions of a disaster in order to effectively manage and respond to it.
Fink's comprehensive audit model	(Fink & Association, 1986)	Fink's comprehensive audit model of disasters is a framework for assessing the effectiveness of disaster management efforts. The model consists of four phases, each phase includes specific objectives and activities that need to be undertaken in order to effectively respond to and recover from a disaster. The model emphasises the importance of conducting regular assessments and audits of disaster management efforts in order to identify areas for improvement and ensure that resources are being used effectively.
McConkey linear model	(McConkey, 1987)	McConkey's linear model of disasters is a framework that describes the progression of a disaster as a linear process, with stages including pre-disaster, onset, impact, response, and recovery. The model emphasises the importance of preparedness and effective response in reducing the impact of a disaster and facilitating recovery. It also highlights the need for coordinated and well-planned actions from multiple stakeholders, including government, and private sector, throughout each stage of the disaster.
Lechat model	(Lechat, 1990)	The Lechat model of disasters is a framework that describes the different phases of a disaster as a cyclical process. The model emphasises the importance of continuity of effort and coordination among different stakeholders throughout the different stages of a disaster. It also highlights the need for adequate planning and resources to mitigate the impact of a disaster and facilitate recovery.

Deming cycle model	(Aguayo, 1991)	The Deming cycle model, also known as the "PDCA cycle" model, is a framework developed to understand the different phases of a disaster. The model includes four stages: plan, do, check, act. Each stage has specific objectives and activities that need to be undertaken in order to effectively respond to and recover from a disaster. The model emphasises the importance of continuous improvement and adaptation to changing conditions throughout the different stages of a disaster. It also highlights the need for ongoing assessment and feedback to ensure that resources are being used effectively.
The five-stage model of Mitroff and Pearson	(Mitroff & Pearson, 1993)	This model is a framework for understanding the different phases of a disaster in relation to organisational crisis preparedness. The model emphasises the importance of preparedness and effective response in reducing the impact of a disaster and facilitating recovery. The detection and learning stages are the primary focus of this model.
Gonzalez, Herrero and Pratt model	(Herrero & Pratt, 1996)	The Gonzalez, Herrero and Pratt model emphasises the importance of planning, coordination and effective communication among stakeholders, including government, non-governmental organisations, and community-based organisations, throughout each stage of the disaster. It also highlights the need for adequate resources and resilience strategies, to mitigate the impact of a disaster and facilitate recovery. The model claims that with the right pre-disaster measures, we can change the consequences of the crisis.
Cuny comprehensive model	(Cuny, 1998)	The Cuny Comprehensive Model of Disasters is a framework that explains how disasters occur, how they are managed, and how they affect communities. It involves five stages: pre-disaster, trigger, impact, response, and recovery. It also includes three key elements: hazards, vulnerabilities, and capacities. The goal of the model is to promote resilience and reduce the negative impacts of disasters. This model considers administrative and management measures necessary in disaster management using a combination of logical, integrated, and cause models.
Circular model of disaster	(Kelly, 1999)	The Circular Model of Disaster is a framework that explains the cyclical nature of disasters. It involves four stages: pre-disaster, impact, response, and reconstruction. The model emphasises the importance of understanding how social and economic factors influence vulnerability to disasters and how disasters in turn can exacerbate existing inequalities. The goal of the model is to promote a more holistic and integrated approach to disaster management, which takes into account the social, economic, and political dimensions of disasters. One of the primary characteristics of this model is its focus on gaining knowledge from real-world disasters.
Expand and contract model	(DPLG, 1998)	The Expand and Contract Model is a framework that explains the dynamic nature of disasters. The model emphasises the importance of understanding how disasters may cause the expansion of social, economic, and political issues, and how the same issues may cause the contraction of the same. The goal of the model is to promote a more holistic and integrated approach

		to disaster management, which takes into account the social, economic, and political dimensions of disasters. A key difference with traditional models is that sequences of action often occur simultaneously.
Weichselgartner integrated model	(Weichselgartner, 2001)	The Weichselgartner Integrated Model for Disaster Risk Management is a framework that combines elements of vulnerability, hazard and resilience in order to create a holistic understanding of disaster risk. The model has two main components: the first is the assessment of the exposure and vulnerability of a community to hazards, and the second is the identification of the capacities and resources that a community has to cope and recover from a disaster. The model aims to provide a comprehensive approach to disaster risk management by considering the interplay between hazards, exposure, vulnerability, capacities, and resilience. The model works through the assessment of probable damage and the planning of future measures to reduce this damage.
Manitoba model	(Manitoba Health Disaster Management, 2002)	The Manitoba Model is a framework that provides a comprehensive approach to disaster management. The model emphasises the importance of involving the community in each of these stages and promoting collaboration among different sectors and levels of government. The goal of the model is to increase the resilience of communities to disasters and reduce the negative impacts of disasters on people's lives and the environment. The model focuses on establishing a balance between preparation and resilience, in order to respond to the specific needs of the disaster.
The four phases model of disaster management	(Cyganik, 2003)	The Four Phases Model of Disaster Management is a framework that describes the progression of disaster management efforts over time. The four phases are: mitigation, preparedness, response, and recovery. The model emphasises the importance of proactive measures such as mitigation and preparedness, as well as the need for an integrated and coordinated approach to disaster management across all phases. The model concentrates on emergency management, with the key phase being the response stage.
Pressure and release (PAR) model	(Wisner et al., 2004)	The Pressure and Release Model is a framework that explains how disasters can lead to social and political changes. It involves two stages: pressure, and release. The model emphasises the importance of understanding how disasters can create pressure on social, economic, and political systems, leading to changes in these systems, and how these changes can then lead to improved resilience and reduced vulnerability to future disasters. The goal of the model is to promote a more holistic and integrated approach to disaster management, which takes into account the social, economic, and political dimensions of disasters and how they interact with each other.
Integrated model of Moe and Pathranarakul	(Lin Moe & Pathranarakul, 2006)	The Integrated Model of Moe and Pathranarakul is a disaster management model that focuses on integrating multiple elements, including social and economic factors, into the decision-making process. It takes into account the unique characteristics of each community, such as their level of preparedness and

vulnerability, as well as the dynamics of the disaster itself. This allows for a more comprehensive and effective response to a disaster, as well as a better understanding of the long-term impacts on the community. Additionally, it considers the importance of community participation and communication during the process.

Disaster risk management framework (DRMF) model	(Baas et al., 2008)	The Disaster Risk Management Framework (DRMF) model focuses on the integration of disaster risk management into the overall development process. It emphasises the importance of involving all stakeholders, including communities, in the identification and assessment of risks and the implementation of appropriate risk reduction measures. Additionally, the DRMF model promotes a proactive approach to disaster management, rather than simply reacting to disasters after they occur. This model has the following three steps: Risk reduction (Normal), Emergency response, Recovery.
Cannon's five components of vulnerability	(Cannon, 2008a)	Cannon's conceptualisation of vulnerability highlights the key connects/disconnects of aspects of vulnerability. This highlights the interaction of five components of vulnerability: governance, social protection, self-protection, wellbeing and base-line status, and livelihood strength and resilience. The model shows that through focusing on the key connections you are able to influence more than one aspect of vulnerability.
McEntire et al. integrated model	(McEntire et al., 2010)	The model also includes several key factors that can impact the disaster, such as hazard characteristics, community characteristics, and response and recovery efforts. The integrated model is useful for understanding the complex nature of disasters and how different factors interact to affect the outcome. It is an integrated approach for modelling the vulnerability that considers social science research, engineering and physics simultaneously.
Octopus model	(Shi et al., 2011)	The Octopus model for disasters is a framework used to understand and evaluate the various factors that contribute to the success of disaster management efforts. The model includes eight key factors: organisational, people, technology, information, environment, process, measurement and governance. Each of these factors is represented by a tentacle of the octopus. The model is designed to provide a holistic view of disaster management, and to help identify areas for improvement in disaster preparedness, response, and recovery efforts
Contreras model	(Contreras, 2016)	This model shows that post-disaster recovery period is not divided into distinct and separate phases, rather these phases overlap, and the boundaries are not clear. The usual four phases are pre-disaster, incident, immediate impact, short-term recovery and long-term recovery. The study proposes that the recovery phase in an affected area should be determined by the progress made in the recovery process, as measured by specific indicators rather than the time elapsed since the disaster event. This implies that recovery process can be dynamic and different areas may be at different stages of recovery at the same time.
Monitoring and evaluating	(Scott et al., 2016)	The framework suggests that improving monitoring and evaluation systems for disaster risk management, though not a

model of disaster risk management		complete solution, can help track data related to strengthening institutional capacity and creating a supportive political environment. This information can help programmes and donors gauge their effectiveness and identify barriers and opportunities for sustainable institutional development in disaster risk management. The framework highlights the importance of M&E in understanding the progress and effectiveness of DRM efforts and in addressing the systemic challenges in building sustainable institutional capacity.
Institutional model for collaborative disaster risk management	(Tau et al., 2016)	The institutional model for collaborative disaster risk management combines theoretical, political and technical dimensions to increase acceptance of disaster risk management and reduction by governments. It emphasises the importance of multidisciplinary approach to disaster risk management and reduction. The model focuses on achieving consensus and cooperation among countries to ensure national implementation of regional framework on disaster risk reduction without interfering with domestic affairs. It is a model that aims to enhance cooperation and coordination among different actors to address the risks and hazards effectively.

HUMAN RESEARCH ETHICS COMMITTEE

**Notification of
Expedited
Approval**

To Chief Investigator or Project Supervisor:	**Doctor Jason Von Meding**
Cc Co-investigators / Research Students:	**Mr. Thomas Johnson
Associate Professor Thayaparan Gajendran**
Re Protocol:	**Approaches to reduce the vulnerability of displaced people: Humanitarian practitioners and the Rohingya**
Date:	**04-Feb-2019**
Reference No:	**H-2018-0376**
Date of Initial Approval:	**04-Feb-2019**

Thank you for your **Response to Conditional Approval (minor amendments)** submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under **Expedited** review by the Ethics Administrator.

I am pleased to advise that the decision on your submission is **Approved** effective **04-Feb-2019**.

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of annual progress reports. If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.

The full Committee will be asked to ratify this decision at its next scheduled meeting. A formal *Certificate of Approval* will be available upon request. Your approval number is **H-2018-0376**.

If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants You may then proceed with the research.

Conditions of Approval

This approval has been granted subject to you complying with the requirements for *Monitoring of Progress*, *Reporting of Adverse Events*, and *Variations to the Approved Protocol* as underlined below.

PLEASE NOTE:
In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports

of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

Monitoring of Progress

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

Reporting of Adverse Events

1. It is the responsibility of the person **first named on this Approval Advice** to report adverse events.
2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.
3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form (via RIMS at https://rims.newcastle.edu.au/login.asp) within 72 hours of the occurrence of the event or the investigator receiving advice of the event.
4. Serious adverse events are defined as:
   Causing death, life threatening or serious disability. Causing or prolonging hospitalisation.
   Overdoses, cancers, congenital abnormalities, tissue damage, whether or not they are judged to be caused by the investigational agent or procedure.
   Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
   Any other event which might affect the continued ethical acceptability of the project.

5. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

Variations to approved protocol

If you wish to change, or deviate from, the approved protocol, you will need to submit an *Application for Variation to Approved Human Research* (via RIMS at https://rims.newcastle.edu.au/login.asp). Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. **Variations must be approved by the (HREC) before they are implemented** except when Registering an approval of a variation from an external HREC which has been designated the lead HREC, in which case you may proceed as soon as you receive an acknowledgement of your Registration.

Linkage of ethics approval to a new grant

HREC approvals cannot be assigned to a new grant or award (i.e. those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Associate Professor Helen Warren-Forward
Chair, Human Research Ethics Committee

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Consent Form for the Research Project:

[Approaches to reduce the vulnerability of displaced people: Humanitarian practitioners and the Rohingya**]**

Mr Thomas Johnson, Dr Jason Von Meding & Dr Thayaparan Gajendran.

Document Version [3]; dated [25/01/19]

I agree to participate in the above research project and give my consent freely.

I understand that the project will be conducted as described in the information statement, a copy of which I have retained.

I understand that my participation in this research is voluntary; I can withdraw from the project at any time and I am not required to give any reason for withdrawing.

I understand that my personal information will remain confidential to the researchers.

I have had the opportunity to have questions answered to my satisfaction.

I consent to participate in the research in the form of an audio recorded interview as described in the participant information sheet.

I would like to be emailed the results of the study as an executive summary **Yes ☐ No☐**

Email (if requesting results): _____

Print Name: _____

Signature: _____ Date: _____

Appendix 5 - Information Statement

Participant Information Statement

**THE UNIVERSITY OF
NEWCASTLE**
AUSTRALIA

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Information Statement for the Research Project:
[Approaches to reduce the vulnerability of displaced people: Humanitarian practitioners and the Rohingya]
Document Version [3]; dated [25/01/19]

Protocol No: H-2015-0112

You are invited to participate in the research project named above which is being conducted within the School of Architecture and Built Environment at the University of Newcastle.The research is part of Thomas Johnson's Ph.D. thesis under the supervision of Dr Jason Von Meding and Dr Thayaparan Gajendran.

Why is the research being done?

Displaced people are often more vulnerable in several key areas in comparison to those with secure tenure. The displaced can become refugees, who generally lack the rights or resources required to reduce their own vulnerability. The main goal of this study is to evaluate the approaches used by humanitarian practitioners to reduce the vulnerability of displaced people. The research focuses on practitioners working on projects involving the Rohingya refugees displaced from Myanmar to Bangladesh. This group is extremely vulnerable and is almost entirely dependent on humanitarian aid. Hence the onus of considering their vulnerability is placed in the hands of the humanitarian sector. The overarching research aim for the study is to improve the effectiveness of vulnerability reducing techniques. This will be achieved by developing propositions to integrate vulnerability reducing techniques into humanitarian projects. Additionally, the study will contribute to the greater body of knowledge on the vulnerability of displaced people.

Who can participate in the research?

Employees of humanitarian organisations involved in project management, health and protection, operating in Bangladesh on the Rohingya refugee crisis will be invited to participate in the research. Participants must be over the age of 18 and must have been working in the area for at least three months.

What would you be asked to do?

If you agree to participate, you will be asked to attend either an online interview or a face-to-face interview. The face-to-face interviews can take place at the Save the Children headquarters in Cox's Bazar, in the meeting room of the Sea Palace Hotel, Cox's Bazar or in your office. The transport costs will be covered by the student researcher. The semi-structured interview will be loosely guided by 15

questions and will be conducted by the student researcher, Thomas Johnson. With your consent, the interview will be recorded using a voice recorder to allow the researcher to transcribe the dialog accurately. After reading this information sheet you will be asked to complete and return the written consent form. Following the invitation, you will have seven days to consider your participation in the study.

What choice do you have?

Participation in this research is entirely voluntary. Only those people who give their informed consent will be included in the project. Whether or not you decide to participate, your decision will not disadvantage you. If you decide to participate, you may withdraw at any time without giving a reason.

How much time will it take?

The interview should take approximately 45-60 minutes to complete.

What are the risks and benefits of participating?

The research may cause participants psychological or emotional stress. If you feel psychological or emotional stress you should advise the researchers. Alternatively, you can seek free professional psychological support by calling the Bangladesh-based Healing Heart Organisation on +880 01752 074497. There are no further anticipated risks from participating in the research. Participation is entirely voluntary, and you are under no obligation to answer questions that you feel uncomfortable with and you can withdraw at any time.

Benefits from participating will come from the research outputs. Through collaborating with NGOs operating on this refugee crisis, the results from this study can feed straight back into the project design of the participants. The more generalisable results could be used to influence practices in other regions. The refugee crisis involves a diverse range of complications and can provide many valuable lessons applicable in other regions. Additionally, the research fills a crucial research gap in the field of disaster vulnerability. There are currently very few academic articles which discuss the vulnerability reduction of displaced people. In particular, there is there is a gap in knowledge regarding the vulnerability of those forcibly displaced.

How will your privacy be protected?

All data collected will be treated in accordance with the University of Newcastle's Research Data and Materials Management Guidelines. All personal data will be securely stored under password protected cloud-based storage using Microsoft OneDrive. Access to the data provided by the participants will be exclusively available to Thomas Johnson, Dr Jason von Meding and Dr Thayaparan Gajendran. All the data will be stored for a minimum of five years after which the data will be permanently destroyed.

The data collected will be confidential with only the researchers able to access your name. The data will be de-identified for publication to ensure it cannot be linked with a participant. Pseudonyms will be used as a protection against direct identification. Additionally, any indirect identifiers, such as workplace, occupation or age, will be omitted from the text.

How will the information collected be used?

The study will utilise qualitative techniques to interpret the information. The data obtained from the interviews will be coded and analysed using QSR's Nvivo. This program effectively manages unstructured information and will help to access ideas and concepts from the data. The transcripts from the interviews will be coded by identifying any relevant terms and grouping these into categories or themes. This relevance will be determined based on whether it relates to a theory or concept, if it relates to key literature, if it is repeated in several places or if the interviewee explicitly states that it is important. It is from the relationship of these themes that form the discussion of the research. The results derived from the primary data along with knowledge from the literature review will answer the research question and help to develop propositions to improve practices to reduce vulnerability in the area.

The results of the study will be included in a Ph.D. thesis written by Thomas Johnson. Additionally, the results will be presented in relevant academic journal articles. The executive summary of the results will be available to the participants in the research. The propositions developed from the research will be provided to the organisations involved in the study. The results from the research will be shared via email to the address provided on the consent form.

What do you need to do to participate?

Please read the information statement and be sure you understand its contents before you consent to participate. If there is anything you do not understand, or you have questions, please contact the researcher via the contact details provided below.

If you would like to participate, please complete the attached Consent Form

Further information

If you would like any further information, please contact:

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Thank you for considering this invitation.
Dr Jason Von Meding   Thomas Johnson
[Chief Investigator]   [Student Researcher]

Complaints about this research

This project has been approved by the University's Human Research Ethics Committee, Approval No. H-2018-0376.

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Services, NIER Precinct, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 4921 6333, email Human-Ethics@newcastle.edu.au.

Appendix 6 - Outputs Related to Study

Book Chapter

Johnson, T., von Meding, J., & Gajendran, T. (2018). Disaster vulnerability of displaced populations in Rakhine, Myanmar. In A. Asgary (Ed.), *Resettlement Challenges for Displaced Population and Refugees*. Springer.

Conference Proceeding

Johnson, T. & von Meding, J. (2019). Striving for Adequate Shelter in Cox's Bazar. In von Meding, J. and the Conference Scientific Committee (eds) (2019). *Disrupting the status quo: Reconstructing, recovery and resisting disaster risk creation*. Conference proceedings. 9th International i-Rec 2019, Gainsville, USA. Montreal: Groupe de recherche IF, GRIF, Université de Montréal. Available at: http://www.grif.umontreal.ca/i-Rec2019/conferenceiREC2019.htm. Consulted: August 24, 2019.